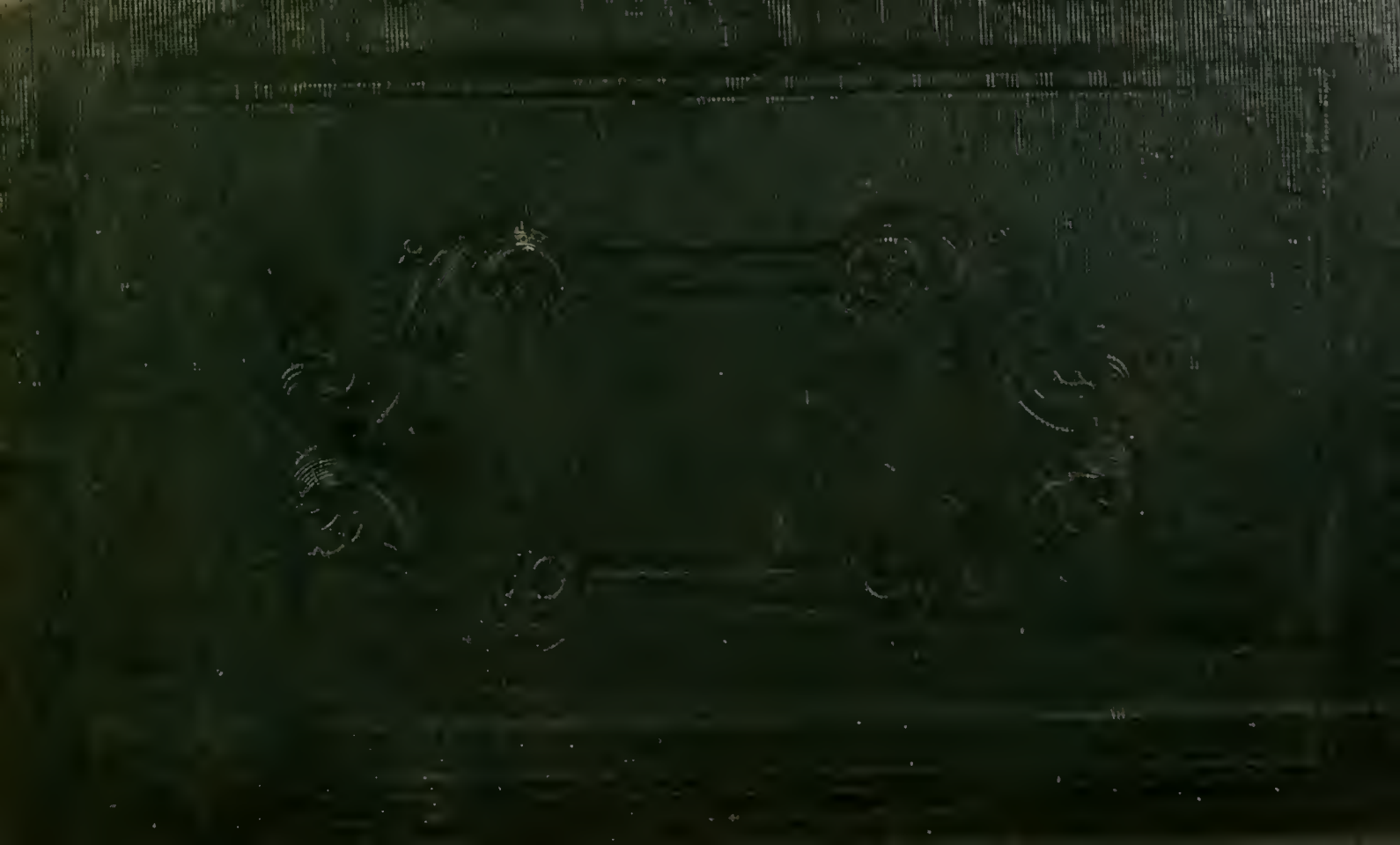

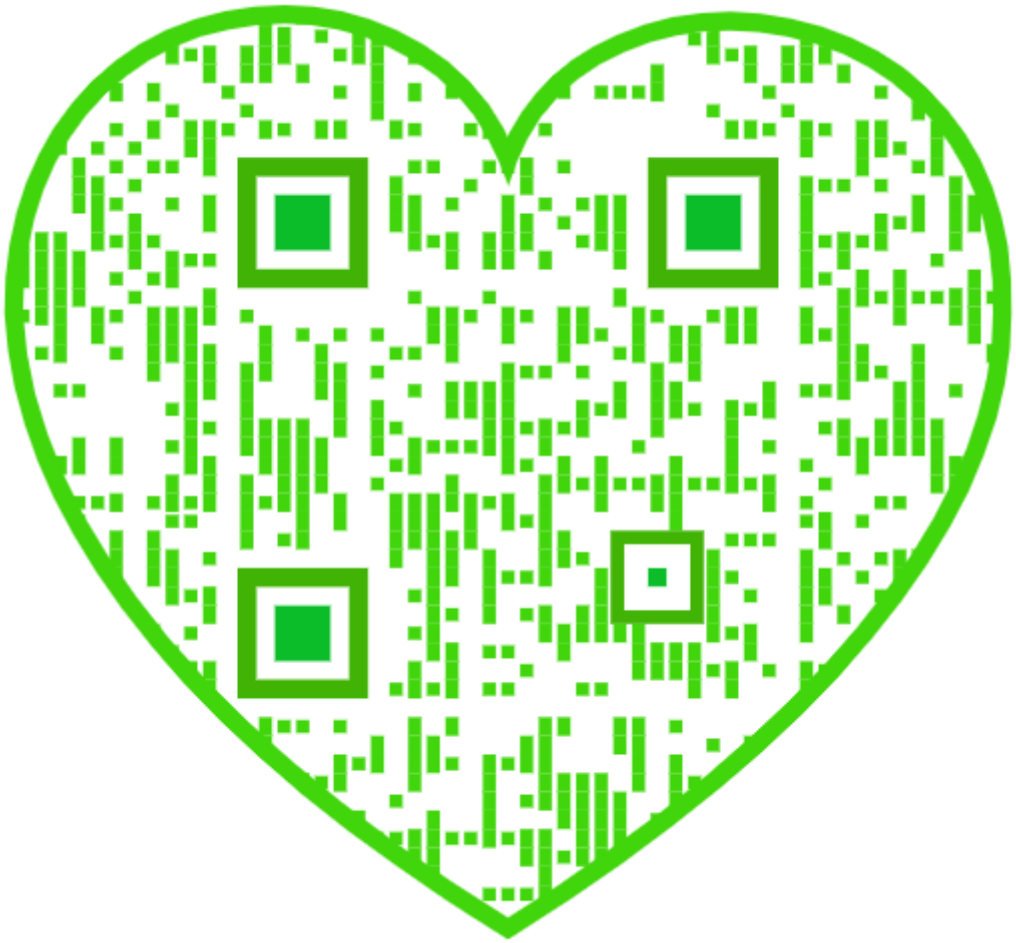

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NEURYPNOLOGY.

NEURYPNOLOGY;

OR, THE

RATIONALE OF NERVOUS SLEEP,

CONSIDERED IN RELATION WITH

ANIMAL MAGNETISM.

ILLUSTRATED BY

NUMEROUS CASES OF ITS SUCCESSFUL APPLICATION
IN THE RELIEF AND CURE OF DISEASE.

BY

JAMES BRAID, M.R.C.S.E., C.M.W.S. &c.

"UNLIMITED SCEPTICISM IS EQUALLY THE CHILD OF IMBECILITY AS IMPLICIT CREDULITY."
Dugald Stewart.

LONDON:
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TO

CHARLES ANDERSON, M.D., F.R.C.S. Ed. &c.

My Dear Sir,

Inclination as well as duty induces me to dedicate this work to you: that I may publicly express the lively sense of gratitude I entertain for the many opportunities enjoyed during my apprenticeship with yourself and your late father, of acquiring a practical as well as theoretical knowledge of my profession; of becoming familiar with your comprehensive views of disease, and their happy application in practice; for the personal kindness shewn me during my pupilage; and for the uninterrupted friendship which has ever since existed betwixt us.

I am aware that you are not practically acquainted with the subject of this treatise, but your intimate knowledge of general science renders you eminently qualified for prosecuting the subject with success;

and permit me to assure you, that its value as a curative power, for an intractable class of diseases, renders it well worthy of your best attention.

Believe me,

My dear Sir,

Most faithfully yours,

JAMES BRAID.

3, ST PETER'S SQUARE,
MANCHESTER, *June* 2, 1843.

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PREFACE.

The circumstances which led me to engage in the investigation of hypnotism, are detailed in the introduction to this little work; in the first part of the treatise I have endeavoured to give the results at which I arrived, in most instances sketching the route by which I travelled, and stating the inferences drawn from the various incidents which occurred in the course of my progress. Having furnished the data from which I drew my conclusions, the reader is thus prepared to determine, whether, on any occasion, I have come to these conclusions without what he would consider sufficient evidence, and in such case can institute additional experiments to any extent he may judge requisite. One circumstance, however, I may remark. From a fear of being misled, I have requested the most sceptical individuals I knew, both professional and merely scientific men, to scrutinize all my experiments in the most critical manner; and have also induced some of my most intelligent and respected friends to submit to the operations, in the hope that I

might thus more certainly guard against being deceived. The results I now submit to the public, and to the kind and candid consideration of my professional brethren, whom I should wish to investigate the subject coolly, and with an honest desire to arrive at truth. Having myself been sceptical, I can make every reasonable allowance for others. On this point I fully subscribe to the propriety of the remark of Treviranus, the celebrated botanist, when speaking of mesmerism. He says, (I quote from memory,) "I have seen much which I would not have believed on your telling; and in all reason, therefore, I can neither hope nor wish that you should believe on mine."

It is quite natural for any man to prefer the evidence of his own senses to that of all others, and I think no one who has the opportunity of examining the phenomena for himself should neglect to do so. However, there are some circumstances which ought to be particularly borne in mind, or very erroneous opinions may be formed by the uninitiated, from what is actually witnessed. First, there is a remarkable difference in the degree of susceptibility of different individuals to the hypnotic influence, some becoming rapidly and intensely affected, others slowly and feebly so. This is only analogous to what we experience in regard to the effects of medicines on different individuals, and especially as regards wine, spirits, and opium, and nitrous oxide. Whilst this is a recognized fact, as regards the latter, it appears to me somewhat surprising to find many, and even professional men too, who seem to expect as much uniformity ought to obtain, in regard to the pheno-

mena during hypnotism, as if we were operating on inanimate matter. On the contrary, they ought to be ready to admit that a variety might be expected to arise, even in the same individual, according to the physical and mental condition of the patient at the moment the operation is performed.

The next most important point for consideration is, the fact of all the phenomena being consecutive. We have thus the extremes of insensibility, and exalted sensibility, of rigidity and mobility, at different stages, and these merging into each other by the most imperceptible gradations, or in the most abrupt manner, according to the mode of treating the patient. It is no unusual thing for different parties to be testing, or calling for tests, for the *opposite conditions*, at the *same instant of time*. These, of course, are incompatible, but, at a certain stage, the transitions from torpor of all the senses, and cataleptiform rigidity, to the most exalted sensibility, and flaccidity of muscle, may be effected almost with the celerity of thought, even by so slight a cause as a breath of air directed against the part. If left at rest it will speedily merge back again, and thus those unacquainted with such peculiarities, will be continually liable to think they discover discrepancies, which, however, only originate from their imperfect knowledge of the subject; just as an unskilful manipulator will be ready to suppose, from his different results, that the observations of other chemists have been erroneous.

The third point meriting especial attention is, the condition of the *mind* at different stages. As results from opium, so also from hypnotism. At one stage

it gives an extraordinary power of concentration of thought, or disposition to rapt contemplation, whereas, at another stage, the discursive, or imaginative faculties are excited into full play, and thus the most expanded, bright, and glowing scenes and images are presented to the fervid imagination. Such effects are quite analogous to those described as resulting from the use of opium, and detailed by the late Sir Humphrey Davy, as experienced in his own person, from the inhalation of the nitrous oxide. "I thus felt a sense of tangible extension, highly pleasurable in every limb, my visible impressions were dazzling and apparently magnified. I heard distinctly every sound in the room, and was perfectly aware of my situation. By degrees, as the pleasurable sensation increased, I lost all connection with external things; trains of vivid visible images rapidly passed through my mind. I existed in a world of newly connected and newly modified ideas." It must also be borne in mind, that these opposite *mental* conditions may glide into each other by the most imperceptible degrees, or by the most abrupt transitions, according to the modes of management, and thus consciousness or unconsciousness, sound sleep, dreaming, or somnambulism, will result, according as sensations or ideas predominate, or are equally vivid. See Hibbert's *Philosophy of Apparitions.* At a certain stage the same abruptness of transition may be realized in the *mental* phenomena, as were referred to in the last paragraph, in respect to the *physical*, and from equally slight causes. I presume it is from this cause that the phrenological manifestation may be so readily and characteristically exhibited at this period. At page 143

I have stated that, were it not that I should consider it an unnecessary waste of time to prosecute the inquiry farther, after the amount of evidence obtained by myself, and others, I had no doubt but I might soon obtain any number of additional cases I might desire. In proof of this, I may remark, that since that period, I was induced one day to try some fresh subjects, when I succeeded in eliciting the manifestations in the most satisfactory manner in the case of a man of forty years of age, and in three other male subjects upwards of twenty years of age. Of the latter, under the excitation of constructiveness and ideality, one wrote, and the other drew patterns, and neither of them had seen such experiments, nor expected to be so tested, nor remembered what happened. The same day I also manipulated three females, one 45 years of age, a young lady of 19, and a girl, all of whom exhibited the manifestations quite distinctly. Another day, to satisfy a number of intellectual friends, I hypnotized three of their personal friends, two of whom were entire strangers to me, and were quite sceptical as to the possibility of my being able to affect them at all. They all exhibited the manifestations most distinctly, two of them in a remarkable degree, and to the extent of twenty manifestations at first trial. Under "conscientiousness," one restored a reticule she had stolen, and burst into a flood of tears at the thought of her delinquency. The friends were alarmed at the intensity of her emotion, but by changing the point of contact, I had her changed from the grave to the gay in a few seconds. A few days after I had other two cases, and I feel assured that in most of the

twelve cases here referred to the parties knew nothing of phrenology, and that not one of them could with certainty point to two of their own organs. I may also add, they were all tested before competent and observant witnesses, who can testify there was no prompting by any one.

It appears quite evident, that whatever images or mental emotions or thoughts have been excited in the mind during nervous sleep, are generally liable to recur, or be renovated and manifested when the patient is again placed under similar circumstances. Notwithstanding the apparent conclusiveness of the cases recorded, that there exists a *natural* connection betwixt certain localities touched and the peculiar manifestations which follow, in order to determine this question in the most decided manner, it is my intention to institute a series of experiments on fresh patients, in order to ascertain to what extent it may be practicable, by arbitrary association, to excite the *opposite* tendencies from the *same* points; also, whether they can be exhibited in the same striking and natural manner by *both* methods, or by which points they can be elicited with the greatest facility and fidelity to natural expression. There will thus be both positive and negative proof to aid us in determining, whether there is any natural and necessary connection existing betwixt the points manipulated, and the manifestations excited; or whether it may depend entirely upon associations which have originated from some partial knowledge of phrenology, from arbitrary arrangements, or accidental circumstances or causes which have been entirely overlooked or forgotten; and which afterwards

produce the results from "that ultimate law of the mind, which ordains, that the repetition of a definite sensation shall be followed by a renovation of the past feelings with which it was before associated." (*Hibbert*, page 316.) I am induced to adopt this course, from my anxiety to remove every possible source of error as to the cause of the original manifestation, and from the recollection of the remarkable circumstance of the woman who, during natural somnambulism, could repeat correctly large portions of the Hebrew Bible, and other books, in languages she had never studied, and was perfectly ignorant of when awake, but which was at length discovered to have been acquired from hearing a clergyman, with whom she resided when a girl, reading them aloud to himself; and also of some patients whilst labouring under disease remembering languages long forgotten. I wish to ascertain whether any such accidental circumstance may have been the cause of the remarkable manifestations arising in the minds of patients when first manipulated. Whatever are the results of my farther inquiry shall be carefully noted and published, as my object is neither to prove nor disprove the truth of phrenology, but to establish the value of hypnotism, and determine how best to apply it, as a means of meliorating the mental, and moral, and physical condition of man.

That during the nervous sleep, there is the power of exciting patients to manifest the passions and emotions, and certain mental functions, in a more striking manner than the same individuals are capable of in the *waking* condition, no one can doubt who has seen much of these experiments. And

it can in no way alter the importance of hypnotism, as a curative power, and extraordinary means of controlling and directing mental functions, in a particular manner, by a simple association of impressions, whether we thus act on the brain as a *single* organ, or as a combination of separate organs; or whether the primary associations have originated from a special organic connection, or from some accidental and unknown cause, or from preconcerted arrangement and arbitrary association.

In such operations as particularly require the use of the eyes, I have never seen patients in the hypnotic state perform what they attempted with the same celerity and accuracy as they were capable of doing when awake, and with the aid of sight. In short, I have never witnessed any phenomena which were not reconcileable with the notion that they arose from the abnormal exaltation or depression of sensations and ideas, or to their being thrown into unusual and varied ratios by the processes resorted to.

Having heard it reported, that by establishing a connection betwixt two patients by a chain or string, that manipulating one would manifest the same phenomena in both, I tried the experiment, but with the precaution that the patients should be in separate rooms, so that the one could not hear, nor feel, from the motion of the air, what the other was doing. I formed the connection by a cord in some cases, and in others by a copper wire, and had parties stationed where they could observe the movements of both at same time. We could discover no such sympathetic influence as is asserted to have been realized by others.

The experiments recorded at page 142 of my having caused patients to hypnotize, manipulate, and rouse themselves, (by simply desiring them to rub their own eyes,) and which produced results precisely the same as when done by any one else, seem to me the most decisive proof possible that the whole results from the mind and body of the patients acting and re-acting on each other, and that it has no dependence on any special influence emanating from another. My first experiments on this point were instituted in the presence of some friends on the 1st May, 1843, and following days. I believe they were the first experiments of the kind which had ever been tried, and they have succeeded in every case in which I have so operated.

With due attention to the points above referred to, and with that practice which is requisite to insure adroitness in experimenting in any department of art or science, and with an honest desire to view every fact having no bias to uphold some previous prejudice or opinion, I have no doubt that the facts and observations set forth in this treatise will soon be very generally confirmed.

A perusal of the cases recorded in the second part will, I trust, render the importance of the subject sufficiently apparent to stimulate inquiry; and I hope it may be gratifying to others to read, as it is to me to be able to record, that the predication I had ventured to make at page 256, as to the probability of hypnotism proving a cure for tetanus and hydrophobia, has already been happily realized in respect to the former intractable and generally fatal disease. After this treatise had been in the press

tho following caso occurred, and its importance must be my apology for giving a brief detail of it here:—

Master J. B., 13 years of age, was suddenly attacked with chilliness and pain all over his body, on the evening of 30th of last March. I was called to attend him the following day, when I considered he had got a febrile attack from cold, and prescribed accordingly. Next day, however, it had assumed a very different aspect. I now found I had got a severe case of opisthotonos to deal with. The head and pelvis were rigidly drawn back, the body forming an arch, and the greatest force could not succeed in straightening it, or bringing the head forward. Whilst the spasm never relaxed entirely, it frequently became much aggravated, when the head was so much drawn back as to seriously impede respiration. The legs were also sometimes flexed spasmodically. Tho effect of the spasm in obstructing the respiration, and hurrying the circulation, was very great, and seemed to place the patient in great jeopardy. Tho pulse was never less than 150, but during the paroxysm was considerably increased. It was evident I had got a most formidable case to contend with, and that no time ought to be lost. I therefore determined to try the power of hypnotism, well knowing how generally such cases end fatally under ordinary treatment. He was quite sensible, and the only difficulty in getting him to comply with my instructions, arose from the recurrence of the severe spasmodic attacks. In a very few minutes, however, I succeeded in reducing the spasm so that his head could be carried forward to the perpendicular, his breathing was relieved, his pulse

considerably diminished, and I left him in a state of comparative comfort. In about two and a-half hours after I visited him again, accompanied by my friend Dr Cochrane. The spasms had recurred, but by no means with the same violence. Dr Cochrane had no difficulty in recognizing the disease, but did not believo any means could save such a case. He had never seen a patient hypnotized till that afternoon, and watched my experiment with much interest and attention. He seemed much and agreeably surprised by the extraordinary influence which an agency so apparently simple exerted over such a case. The pupil was speedily dilated, as if under the influence of belladonna ; the muscular spasm relaxed, and in a few minutes he was calmly asleep. Having ordered three calomel powders to be given at intervals, we left him comfortably asleep. Next day there was still spasm of the muscles, but by no means so severe. Whilst I determined to follow up the hypnotic treatment, which had been so far successful, I considered it would be highly imprudent to trust *wholly* to that in the treatment of such a case. As I consider such cases are generally attended with inflammation of the medulla oblongata, and upper part of the spinal cord, I bled him, and ordered the calomel to be continued. The same plan was persevered in, hypnotizing him occasionally for some days, administering calomel till the gums were slightly affected, cold lotion to the head, and the antiphlogistic regimen till I considered all risk of inflammatory action past, when he was treated more generously, and I am gratified to say he is now quite well.

I feel confident that without the aid of hypnotism

this patient would have died. I sincerely wish it may prove equally successful in other cases of the kind, and also in that hitherto fatal disease, hydrophobia. My anxiety to see it fairly tried in the latter disease induces me to offer my gratuitous services in any case of that disease occurring within a few hours' journey of Manchester.

I consider it necessary to explain that my reason for having inserted some cases attested by the patients and others is, that most unwarrantable interferences have been resorted to by several medical men, in order to misrepresent some of them. In one instance, in order to obtain an *attested erroneous* document, the case was READ to *the patient and others present*, THE VERY REVERSE OF WHAT WAS WRITTEN. However extraordinary such conduct may appear, the fact of its occurrence was *publicly proved, and borne testimony to by the patient and other parties present on the occasion when the document was obtained.*

INTRODUCTION.

General remarks — Why Hypnotism has been separated from Animal Magnetism — How far considered useful in the cure of disease — Its powers on the animal functions — Certain erroneous charges refuted — Opinions and practice of Bertrand and Abbé Faria, Mr Brooks, Dr Prichard — Its moral influence — Should be used by professional men only — Definition of terms.

It was my intention to have published my "Practical Essay on the Curative Agency of Neuro-Hypnotism," exactly as delivered at the Conversazione given to the members of the British Association in Manchester, on the 29th June, 1842. By so doing, and by appending foot notes, comprising the data on which my views were grounded, it would have conveyed a pretty clear knowledge of the subject, and of the manner in which it had been treated. It has since been suggested, however, that it might readily be incorporated with the short Elementary Treatise on Neuro-Hypnology, which I originally intended to publish, and which I am earnestly solicited to do, by letters from professional gentlemen from all quarters. I now, therefore, submit my views to the public in

the following condensed form. I shall aim at brevity and perspicuity; and my great object will be to teach others all I know of the modes of inducing the phenomena, and their application in the cure of diseases, and to invite my professional brethren to labour in the same field of inquiry, feeling assured, that the cause of science and humanity must thereby be promoted.

It was with this conviction I offered my "Practical Essay on the Curative Agency of Neuro-Hypnotism," to the medical section of the British Association.

In November, 1841, I was led to investigate the pretensions of animal magnetism, or mesmerism, as a complete sceptic, from an anxiety to discover the source of fallacy in certain phenomena I had heard were exhibited at M. Lafontaine's conversazioni. The result was, that I made some discoveries which appeared to elucidate certain of the phenomena, and rendered them interesting, both in a speculative and practical point of view. I considered it a most favourable opportunity for having additional light thrown upon this subject, to offer a paper to the medical section of the British Association, which was about to meet in Manchester. Gentlemen of scientific attainments might thus have had an opportunity of investigating it, and eliciting the truth, unbiassed by local or personal prejudice. I hoped to learn something from others, on certain points which were extremely mysterious to me, as to the *cause* of some remarkable phenomena. I accordingly intimated my intention to the secretaries, by letter, on 18th May, and on the morning of Wednesday, the 22d June, 1842, sent the paper I proposed reading for

the consideration of the committee, intimating also, by letter, my intention to produce before them as many of the patients as possible, whose cases were referred to in proof of the curative agency of Neuro-Hypnotism, so that they might have an opportunity of ascertaining, for themselves, the real facts of the cases, uninfluenced by any bias or partiality that I might exhibit as the discoverer and adapter of this new mode of treatment. The committee of the medical section, however, were pleased to decline entertaining the subject.

Many of the most eminent and influential members of the Association, however, had already witnessed and investigated my experiments in private, and expressed themselves highly gratified and interested with them. In compliance with the repeated desire of these gentlemen, and many other eminent members of the Association to whom I could not possibly afford time to exhibit my experiments in private, and who were anxious to have an opportunity afforded them of seeing, hearing, and judging of the phenomena for themselves, I gave a gratuitous conversazione, when I read the "Rejected Essay," and exhibited the experiments in a public room, to which all the members of the Association had been respectfully invited. The interest with which the subject was viewed by the members of the Association generally, was sufficiently testified by the number and high respectability of those who attended on that occasion; in reference to which the chairman requested the reporters to put on record, "that he had been in the habit for many years of attending public meetings, and he had never in his life seen a more unmixed, a more entirely

respectable assembly in Manchester." It was also manifested by their passing a vote of thanks at the conclusion of the conversazione, for my having afforded an opportunity to the members of the British Association of witnessing my experiments, to which they had previously borne testimony as having been "highly successful."

On that occasion I stated, there were certain phenomena, which I could readily induce by particular manipulations, whilst I candidly confessed myself unable to explain the *modus operandi* by which they were induced. I referred particularly to the extraordinary rapidity with which dormant functions, and a state of cataleptiform rigidity, may be changed to the extreme opposite condition, by a simple waft of wind, either from the lips, a pair of bellows, or by any other mechanical means. I solicited information on these points, both privately and publicly, from all the eminently scientific gentlemen who honoured me with their company during the meetings of the British Association in this town; but no one ventured to express a decided opinion as to the causes of these remarkable phenomena. I now beg to assure every reader of this treatise, that I shall esteem it a great favour to be enlightened on points which I confess are, at present, still above my comprehension.

It will be observed, for reasons adduced, I have now entirely separated Hypnotism from Animal Magnetism. I consider it to be merely a simple, speedy, and certain mode of throwing the nervous system into a new condition, which may be rendered eminently available in the cure of certain disorders. I

trust, therefore, it may be investigated quite independently of any bias, either for or against the subject, as connected with mesmerism; and only by the facts which can be adduced. I feel quite confident we have acquired in this process a valuable addition to our curative means; but I repudiate the idea of holding it up as a universal remedy; nor do I even pretend to understand, as yet, the *whole range of diseases* in which it may be useful. Time and experience alone can determine this question, as is the case with all other new remedies.

When we consider that in this process we have acquired the power of raising sensibility to the most extraordinary degree, and also of depressing it far below the torpor of natural sleep;* and that from the latter condition, any or all of the senses may be raised to the exalted state of sensibility referred to, almost *with the rapidity of thought*, by so simple an agency as a puff of air directed against the respective parts; and that we can also raise and depress the force and frequency of the circulation, locally or generally, in a most extraordinary degree, it must be evident we have thus an important power to act with. Whether these extraordinary physical effects are produced through the imagination chiefly, or by other means, it appears to me quite certain, that the imagination has never been so much under our control, or capable of being made to act in the same beneficial and uniform manner, by any other mode of management hitherto known.

* *Vide* Experiments, pp. 61 to 67.

That we really have acquired in this process a valuable addition to our curative means, which enables us speedily to put an end to many diseases which resisted ordinary treatment, I think will be satisfactorily manifested by the cases which I have recorded. Many of these cases have been seen by other medical men, and are so remarkable, so self-evident to every candid and intelligent mind, that it is impossible, with any shew of propriety, to deny them. Most unwarrantable and novel attempts have been made, not only to extinguish the farther prosecution of Hypnotism, but also to misrepresent all I had either said or done on the subject, and thus damage me, as well as Hypnotism, in public estimation. I am in possession of a mass of documentary evidence in proof of this, to an extent which could scarcely be credited. But I shall not trouble my readers with details of all that has been done in order to prejudice my patients against me.

As regards general principles, it has even been attempted, by garbled statements, to set forth such gross misrepresentations as could only be credited by parties totally ignorant of the subject. Thus it was alleged, that my mode of hypnotizing was no novelty; on the contrary, that it was an unacknowledged plagiarism, and that it was the opinion and practice of Bertrand and the Abbé Faria. Now, so far as I have been able to comprehend the meaning of Bertrand, which Colquhoun observes, "it is rather difficult to comprehend," he adheres "to the theory of imagination, and imagination alone," (Colquhoun's *Introduction*, p. 94.) At p. 34, vol. iv. of

the "Encyclopædia of Practical Medicine," Dr Prichard says of Bertrand, that he "comes at last to the conclusion, that all the results of these operations are brought about through the influence of the mind;" that is, through the influence of the imagination of the patients acting on themselves. Bertrand also supports this opinion by the manner in which the Abbé Faria performed magnetization. His plan was this: "He placed the patient in an arm-chair, and after telling him to shut his eyes, and collect himself, suddenly pronounced, in a strong voice and imperative tone, the word 'dormez,' which generally produced on the individual an impression sufficiently strong to give a slight shock, and occasion warmth, transpiration, and *sometimes* somnambulism." Had his success by this method been as general as mine, would he have used the word "*sometimes*" on this occasion?* It is farther added, "if the first attempt failed, he tried the experiment a second, third, and even a fourth time, after which he declared the individual incapable of entering into the state of lucid sleep." Whilst it is doubted that his success was equal to what he represented it, still Bertrand states, in reference to the Abbé Faria, that it was incontestable, "that he very often succeeded." Now, is this not sufficient proof, that his success was by no means so general as mine? And who does not see, on perusing my directions for hypnotizing,† that our methods are very different?

It is farther added, "The complete identity of the phenomena thus produced by a method which operated

* *Vide* p. 24. † For proof of this, see pp. 27 and 28.

confessedly through the imagination, with those which display themselves under the ordinary treatment of the magnetizers, affords a strong reason for concluding that the results in other instances depend upon a similar principle." It is still farther added, that M. Bertrand denies the necessity of strong intense volitions of the operator being necessary to produce the result. He declared, "that in trials made by himself, precisely the same results followed, whether he WILLED to produce them or not, provided that the patient was *inwardly persuaded that the whole ritual was duly observed.*" Can any farther remarks be required to prove that Bertrand referred the result entirely to the effect of imagination? And can any one who has attended to what I have given as my opinion, say that this either *was*, or *is* my opinion? Certainly quite the contrary. The parties referred to, therefore, have only proved their belief of how easy it is, by garbled statements, to misrepresent the truth, when submitting such remarks to those ignorant of the subject, or who are blinded by prejudice.

The following remarks by Mr H. Brookes, a celebrated lecturer on animal magnetism, will illustrate this point rather better than the individuals referred to. On hearing that I had changed my original opinion about *identity*, he writes thus: "I am very glad you have at length found reason to change your original opinion as to the identity of your phenomena with those of mesmerism. From the very first I freely admitted the value and importance of your discovery, but I could not admit that identity, and I blamed you for insisting upon it so hastily, and using such hard words against the animal magnetists, because they

could not agree with you. I thought, and still think, you did wrong in that, and that you certainly did yourself injustice, for in fact you are the original discoverer of *a new agency*, and not of a mere modification of an old one."

But when so much had been said of Bertrand, with the hope of making it appear that I had either been ignorant of, or copied his views without due acknowledgment, which is evidently erroneous, why not have quoted him also to prove I was wrong in attributing curative effects as resulting from these operations? Let us hear what M. Bertrand says on this point. He "declares, that it is difficult to imagine with what facility the practisers of the art succeed in relieving the most severe affections of the nervous system. Attacks of epilepsy, in particular, are rendered considerably less frequent and severe by their method skilfully employed; which displays in so remarkable a manner the influence of moral impressions on the physical state of the constitution." After such declarations in favour of the *curative power* of mesmerism, had M. Bertrand's method of inducing the condition been as generally and speedily successful as mine, will any one believe that it would not have been brought more generally into practice ere now? Mr Mayo, one of our best authorities, in a letter to me on this subject, states distinctly that the great reason for its not being more generally introduced into practice, was the tediousness of the processes for inducing the condition, and the uncertainty, after all the time and trouble devoted to the manipulation, of producing any result whatever. He concludes his observations on this subject, by the remark, "*It took up too much time.*" And

Dr Prichard, author of the article referred to in the Encyclopædia of Practical Medicine, adds, "On the whole, when we consider the degree of suffering occasioned by disorders of the class over which magnetism exerts an influence, through the medium of the imagination, and the little efficacy which ordinary remedies possess, of alleviating or counteracting them, it is much to be wished that this art, notwithstanding the problematical nature of the theories connected with it, were better known to us in actual practice."

I am aware great prejudice has been raised against mesmerism, from the idea that it might be turned to immoral purposes. In respect to the Neuro-Hypnotic state, induced by the method explained in this treatise, I am quite certain that *it* deserves no such censure. I have proved by experiments, both in public and in private, that during the state of excitement, the judgment is sufficiently active to make the patients, if possible, even *more* fastidious as regards propriety of conduct, than in the waking condition; and from the state of rigidity and insensibility, they can be roused to a state of mobility, and exalted sensibility, either by being rudely handled, or even by a breath of air. Nor is it requisite this should be done by the person who put them into the Hypnotic state. It will follow equally from the manipulations of any one else, or a current of air impinging against the body, from any mechanical contrivance whatever. And, finally, the state cannot be induced, in any stage, unless with the knowledge and consent of the party operated on. This is more than can be said respecting a great number of our most valuable medicines, for there are many which we are in the daily habit of

using, with the best advantage in the relief and cure of disease, which may be, and have been rendered most potent for the furtherance of the ends of the vicious and cruel; and which can be administered *without the knowledge of the intended victim.* It ought never to be lost sight of, that there is the *use* and *abuse* of every thing in nature. It is the *use*, and only the *judicious use* of Hypnotism, which I advocate.

It is well known that I have never made any secret of my modes of operating, as they have not only been exhibited and explained publicly, but also privately, to any professional gentleman, who wished for farther information on the subject. Encouraged by the confidence which flows from a consciousness of the honesty and integrity of my purpose, and a thorough conviction of the reality and value of this as a means of cure, I have persevered, in defiance of much, and, as I think, unwarrantable and capricious opposition.

In now unfolding to the medical profession generally—to whose notice, and kind consideration, this treatise is more particularly presented—my views on what I conceive to be a very important, powerful, and extraordinary agent in the healing art; I beg at once distinctly to be understood, as repudiating the idea of its being, or ever becoming, a universal remedy. On the contrary, I feel quite assured it will require all the acumen and experience of medical men, to decide in what cases it would be safe and proper to have recourse to such a mean; and I have always deprecated, in the strongest terms, any attempts at its use amongst unprofessional persons, for the sake of curiosity, or even for a nobler and more benevolent object—the relief of the infirm; because I am satisfied

it ought to be left in the hands of professional men, and of them only. I have myself met with some cases in which I considered it unsafe to apply it at all; and with other cases in which it would have been most hazardous to have carried the operation so far as the patients urged me to do.*

In now submitting my opinions and practice to the profession in the following treatise, I consider myself as having discharged an imperative duty to them, and to the cause of humanity. In future, I intend to go on quietly and patiently, prosecuting the subject in the course of my practice, and shall leave others to adopt or reject it, as they shall find consistent with their own convictions.

As it is of the utmost importance, in discussing any subject, to have a correct knowledge of the meaning attached to peculiar terms made use of, I shall now give a few definitions, and explain my reasons for adopting the terms selected.

Neurypnology is derived from the Greek words νεῦρον, nerve; ὑπνος, sleep; λογος, a discourse; and means the *rationale*, or *doctrine* of *nervous* sleep, which I define to be, "a peculiar condition of the nervous system, into which it can be thrown by artificial contrivance:" or thus, "a peculiar condition of the nervous system, induced by a fixed and abstracted attention of the mental and visual eye, on one object, not of an exciting nature."

* The circumstances which render my operations dangerous, the symptoms which indicate danger, and the mode of acting when they occur, to remove them, are pointed out, pp. 52 and 53.

By the term "Neuro-Hypnotism," then, is to be understood "nervous sleep;" and, for the sake of brevity, suppressing the prefix "Neuro," by the terms —

Hypnotic,	Will be understood,	The state or condition of *nervous* sleep.
Hypnotize,		To induce *nervous* sleep.
Hypnotized,		One who has been put into the state of *nervous* sleep.
Hypnotism,		*Nervous* sleep.
Dehypnotize,		To restore from the state or condition of *nervous* sleep.
Dehypnotized,		Restored from the state or condition of *nervous* sleep.
and Hypnotist,		One who practises Neuro-Hypnotism.

Whenever, therefore, any of these terms are used in the following pages, I beg to be understood as alluding to the discovery I have made of certain peculiar phenomena derived and elicited by my mode of operating; and of which, to prevent misconception, and intermingling with other theories and practices on the nervous system, I have thought it best to give the foregoing designation.

I regret, as many of my readers may do, the inconvenient length of the name; but, as most of our professional terms, and nearly all those of a *doctrinal* meaning, have a Greek origin, I considered it most in accordance with good taste, not to deviate from an established usage. To obviate this in some degree, I have struck out two letters from the original orthography, which was Neuro-Hypnology.

NEURYPNOLOGY.

PART I.

CHAPTER I.

Introductory remarks — Circumstances which directed to the investigation — Arsal phenomenon observed — Experiments instituted to prove the cause of it — Opinions and conclusions drawn from them — Reasons for separating Hypnotism from Mesmerism — Hypnotism more generally successful than Animal Magnetism — Mr Herbert Mayo's testimony on this point — Proofs of this referred to — Different modes by which it can be induced — Can only be expected to succeed by complying with the whole conditions required.

Having, in the introduction, presented a cursory view of certain points, and given a few explanatory remarks, I shall now proceed to a more particular and detailed consideration of the subject. I shall explain the course I have pursued in prosecuting my investigation; the phenomena which I discovered to result from the manipulations had recourse to; the inferences I was consequently led to deduce from them; the method I now recommend for inducing the hypnotic condition, for applying it in the cure

of various disorders, and the result of my experience, as to the efficacy of hypnotism as a curative agent.

By the impression which hypnotism induces on the nervous system, we acquire a power of rapidly curing many functional disorders, most intractable, or altogether incurable, by ordinary remedies, and also many of those distressing affections which, as in most cases they evince no pathological change of structure, have been presumed to depend on some peculiar condition of the nervous system, and have therefore, by universal consent, been denominated "*nervous complaints;*" and as I felt satisfied it was not dependent on any special agency or emanation, passing from the body of the operator to that of the patient, as the animal magnetizers allege is the case by their process, I considered it desirable, for the sake of preventing misconception, to adopt new terms, as explained in the introduction.

I was led to discover the mode I now adopt with so much success for inducing this artificial condition of the nervous system, by a course of experiments instituted with the view to determine the cause of mesmeric phenomena. From all I had read and heard of mesmerism, (such as, the phenomena being capable of being excited in so few, and these few individuals in a state of disease, or naturally of a delicate constitution, or peculiarly susceptible temperament, and from the phenomena, when induced, being said to be so exaggerated, or of such an extraordinary nature,) I was fully inclined to join with those who considered the whole to be a system of collusion or delusion, or of excited imagination, sympathy, or imitation.

The first exhibition of the kind I ever had an opportunity of attending, was one of M. Lafontaine's conversazioni, on the 13th November, 1841. That night I saw nothing to diminish, but rather to confirm, my previous prejudices. At the next conversazione, six nights afterwards, *one* fact, the inability of a patient to *open his eyelids*, arrested my attention. I considered that to be a *real phenomenon*, and was anxious to discover the physiological cause of it. Next night, I watched this case when again operated on, with intense interest, and before the termination of the experiment, felt assured I had discovered its cause, but considered it prudent not to announce my opinion publicly, until I had had an opportunity of testing its accuracy, by experiments and observation in private.

In two days afterwards, I developed my views to my friend Captain Brown, as I had also previously done to four other friends; and in his presence, and that of my family, and another friend, the same evening, I instituted a series of experiments to prove the correctness of my theory, namely, that the continued fixed stare, by paralyzing nervous centres in the eyes and their appendages,* and destroying the equilibrium of the nervous system, thus produced the phenomenon referred to. The experiments were varied so as to convince all present, that they fully bore out the correctness of my theoretical views.

My first object was to prove, that the inability of the patient to open his eyes was caused by paralyzing

* By this expression I mean the state of exhaustion which follows too long continued, or too intense action, of any organ or function.

the levator muscles of the eyelids, through their continued action during the protracted fixed stare, and thus rendering it *physically* impossible for him to open them.* With the view of proving this, I requested Mr Walker, a young gentleman present, to sit down, and maintain a fixed stare at the top of a wine bottle, placed so much above him as to produce a considerable strain on the eyes and eyelids, to enable him to maintain a steady view of the object. In three minutes his eyelids closed, a gush of tears ran down his cheeks, his head drooped, his face was slightly convulsed, he gave a groan, and instantly fell into profound sleep, the respiration becoming slow, deep and sibilant, the right hand and arm being agitated by slight convulsive movements. At the end of four minutes I considered it necessary, for his safety, to put an end to the experiment.

This experiment not only proved what I expected, but also, by calling my attention to the spasmodic state of the muscles of the face and arm, the peculiar state of the respiration, and the condition of the mind, as evinced on rousing the patient, tended to

* Attempts have been made to prove, that I got this idea from a person who publicly maintained that the patient referred to *could* have opened his eyes *if he liked;* to this the patient having replied, "I have tried all I could and cannot;" the individual referred to, in support of his opinion, alleged, that the inability *was only imaginary;* that he "could easily believe that a man may stand with his back to a wall, and may really believe that he has no power to move from the wall." It is therefore clear this individual attributed the phenomena to a *mental*, whilst I attributed it to a *physical* cause.

prove to my mind I had got the key to the solution of mesmerism. The agitation and alarm of this gentleman, on being roused, very much astonished Mrs Braid. She expressed herself greatly surprised at his being so much alarmed about nothing, as she had watched the whole time, and never saw me near him, or touching him in any way whatever. I proposed that she should be the next subject operated on, to which she readily consented, assuring all present that she would not be so easily alarmed as the gentleman referred to. I requested her to sit down, and gaze on the ornament of a china sugar basin, placed at the same angle to the eyes as the bottle in the former experiment. In two minutes the expression of the face was very much changed; at the end of two minutes and a half the eyelids closed convulsively; the mouth was distorted; she gave a deep sigh, the bosom heaved, she fell back, and was evidently passing into an hysteric paroxysm, to prevent which I instantly roused her. On counting the pulse I found it had mounted up to 180 strokes a minute.

In order to prove my position still more clearly, I called up one of my men-servants, who knew nothing of mesmerism, and gave him such directions as were calculated to impress his mind with the idea, that his fixed attention was merely for the purpose of watching a chemical experiment in the preparation of some medicine, and being familiar with such he could feel no alarm. In two minutes and a half his eyelids closed slowly with a vibrating motion, his chin fell on his breast, he gave a deep sigh, and instantly was in a profound sleep, breathing loudly. All the persons present burst into a fit of laughter,

but still he was not interrupted by us. In about one minute after his profound sleep I roused him, and pretended to chide him for being so careless, said he ought to be ashamed of himself for not being able to attend to my instructions for three minutes without falling asleep, and ordered him down stairs. In a short time I recalled this young man, and desired him to sit down once more, but to be careful not to go to sleep again, as on the former occasion. He sat down with this intention, but at the expiration of two minutes and a half his eyelids closed, and exactly the same phenomena as in the former experiment ensued.

I again tried the experiment by causing Mr Walker to gaze on a different object from that used in the *first* experiments, but still, as I anticipated, the phenomena were the same. I also tried him *à la Fontaine*, with the thumbs and eyes, and likewise by gazing on my eyes without contact, and still the effects were the same, as I fully expected.

I now stated that I considered the experiments fully proved my theory; and expressed my entire conviction that the phenomena of mesmerism were to be accounted for on the principle of a derangement of the state of the cerebro-spinal centres, and of the circulatory, and respiratory, and muscular systems, induced, as I have explained, by a fixed stare, absolute repose of body, fixed attention, and suppressed respiration, concomitant with that fixity of attention. That the whole depended on the physical and psychical condition of the patient, arising from the causes referred to, and not at all on the volition, or passes of the operator, throwing out a magnetic fluid, or exciting into activity some mystical universal fluid or

medium. I farther added, that having thus produced the *primary* phenomena, I had no doubt but the others would follow as a matter of course, time being allowed for their gradual and successive development.*

* It has been asserted, for the mere purpose of proving the contrary, that I had claimed being the first to discover that *contact* was *not* necessary, and that a magnetic fluid was not required to produce the phenomena of mesmerism. I never made any such claim, but illustrated these facts by the most simple and conclusive experiments probably which were ever adduced for that purpose. In one of my lectures, I gave a history of mesmerism, including Mesmer's attempt to mesmerize trees in Dr Frankliu's garden, to prove to the Commission of 1784, that the patients would become affected when they went under the mesmerized trees, from the magnetic fluid passing from the trees to the patients. This was proof sufficient, that even *Mesmer* did not hold that *contact* was necessary. I farther stated the fact, that the experiment was a failure, as the patient became affected, *not* under the *mes*merized, but under the *un*mesmerized trees, which led the Commissiou to infer, that the phenomena resulted from imagination, and not from the influence of a magnetic fluid. Here, then, we had two theories, neither of which considered contact necessary. Surely no one could suppose that I wished to lay claim to these facts as discoveries of my own, seeing I gave the dates when the occurrence took place, which was many years before I was born.

Moreover, I explained, at the same lecture, the different modes of mesmerizing, by passes *at a distance*, and by pointing the fingers at the eyes and forehead, adopted by others, long before I made any experiments on the subject; and at subsequent lectures, from observing the graceful attitudes some patients assumed during the hypnotic state, and the ease with which they could maintain any given position, by be-

For a considerable time I was of opinion that the phenomena induced by my mode of operating and that of the mesmerizers, were identical; and, so far as I have yet personally seen, I still consider the condition of the nervous system induced by both modes to be at least analogous. It appeared to me that the fixation of the mind and eyes was attained occasionally during the monotonous movements of the mesmerizers, and thus they succeeded sometimes, and as it were, by chance; whereas, by my insisting on the eyes being fixed in the most favourable position, and the mind thus rivetted to one idea, as the *primary and imperative conditions*, my success was consequently general and the effects intense, while theirs was feeble and uncertain. However, from what the mesmerizers state as to effects which they can produce in certain cases, there seem to be differences sufficient to warrant the conclusion that they ought to be considered as distinct agencies; and for the following reasons. The mesmerizers positively assert that they can produce certain effects, which I have never been able to produce by my mode, although I have tried to do so.*

coming cataleptiformly fixed in it, I hazarded the opinion, that it may have been to hypnotism the Grecians were indebted for their fine statuary; and the Fakirs for their power of performing their remarkable feats. I also expressed my belief, that the rapt state of religious enthusiasts, such as that of the monks of Mount Athos, arose from the same cause, although none of the parties might have understood the true principle by which they were produced.

* The effects I allude to are such as, telling the time on a watch held behind the head, or placed on the pit of the stomach; reading closed letters, or a shut book; perceiving

Now, I do not consider it fair or proper to impugn the statements of others in this matter, who are known to be men of talent and observation, and of undoubted credit in *other* matters, merely because *I* have not *personally* witnessed the phenomena, or been able to produce them myself, either by my own mode or theirs. With my present means of knowledge I am willing to admit that certain phenomena to which I refer *have* been induced by others, but still I think most of them may be explained in a different and more natural way than that of the mesmerizers. When I shall have personally had evidence of the special influence and its effects to which they lay claim, I shall not be backward in bearing testimony to the fact.

However, the greatest and most important difference is this, that they can succeed so seldom, and I so generally, in inducing the phenomena which we both profess thus to effect. Granting, therefore, to the mesmerizers the full credit of being able to produce certain wonderful phenomena which I have not been able to produce by my plan, still it follows, that mine is superior to theirs in as far as *general applicability and practical utility are concerned.* Mine has also this advantage, that I am quite certain no one can be affected by it, in any stage of the process, unless by the free will and consent of the patient, which is at once sufficient to exonerate the practice

what is doing miles off; having the power of perceiving the nature and cure of the diseases of others, although uneducated in medical science; mesmerising patients at miles' distance, without the knowledge or belief in the patient that any such operation is intended.

from the imputations of being capable of being converted to immoral purposes, which has been so much insisted on to the prejudice of animal magnetism. This has arisen from the mesmerizers asserting that they have the power of overmastering patients irresistibly, even whilst at a distance, by mere volitions and secret passes.

I am fully borne out by the opinion of that eminent physiologist, Mr Herbert Mayo, in my view of the subject, that my plan is "the best, the shortest, and surest for getting the sleep," and throwing the nervous system, by artificial contrivance, into a new condition, which may be rendered available in the healing art. At a private conversazione, which I gave to the profession in London on the 1st of March, 1842, he examined and tested my patients most carefully, submitted himself to be operated on by me both publicly and privately, and was so searching and inquisitive in his investigations as to call forth the animadversions of a medical gentleman present, who thought he was not giving me fair play; but which he has assured me proceeded from an anxious desire to know the truth, not being biassed by having any peculiar views of his own to bring forward; and because he considered the subject most important, both in a speculative and practical point of view.

Whatever I advance, therefore, in the following remarks, I wish to be distinctly understood as strictly in reference to my own mode of operating, and distinct from that of all others. The latter I shall merely refer to in as far as is necessary to point out certain sources of fallacy by which the phenomena of the one may be confounded with those of the other.

In proof of the general success of my mode of operating, I need only name, that at one of my public lectures in Manchester, fourteen male adults, in good health, all strangers to me, stood up at once, and ten of them became decidedly hypnotized. At Rochdale I conducted the experiments for a friend, and hypnotized twenty strangers in one night. At a private conversazione to the profession in London, on the 1st of March, 1842, eighteen adults, most of them entire strangers to me, sat down at once, and in ten minutes sixteen of them were decidedly hypnotized. Mr Herbert Mayo tested some of these patients, and satisfied himself of the reality of the phenomena. On another occasion I took thirty-two children into a room, none of whom had either seen or heard of hypnotism or mesmerism : I made them stand up at three times, and in ten or twelve minutes had the whole thirty-two hypnotized, maintaining their arms extended while in the hypnotic condition, and this at mid-day. In making this statement, I do not mean to say they were in the *ulterior* stage, or state of *torpor ;* but that they were in the *primary* stage, or that of *excitement*, from which experience has taught me confidently to rely that the torpid and rigid state will certainly follow, by merely affording time for the phenomena to develop themselves. In the Stockport Chronicle of 4th February, 1842, there is a report of a lecture delivered in that town a few days before. A dozen male patients were made to stand up at once, and treated according to my method, six of them became hypnotized, and two of them so deeply, as to cause the lecturer very considerable trouble to rouse them. With one named "Charlie," all the usual

means, including buffetings and frictions before a fire, did not succeed in restoring speech until he had been made to swallow nearly half a tumbler glass of *neat gin*. I consider this important as being the testimony of *an enemy*. It can take place also in the dark, as well as by day or by gas light; when the eyes are bandaged, as when they are uncovered, by merely keeping the eyes fixed, the body in a state of absolute rest, and the mind abstracted from all other considerations. In cases of children, and those of weak intellect, or of restless and excitable minds, whom I could not manage so as to make them comply with these simple rules, I have always been foiled, although most anxious to succeed. This I consider a strong proof of the correctness of my views. By arresting the attention, and fixing the eyes, it is also successful with brute animals.

This general success of my plan, both with man and brute animals, I consider sufficient to prove it proceeds from a law in the animal economy. The exceptions to success are so few as to lead to the conclusion that they arise from a non-compliance with the conditions. It is, however, unquestionable, that there exists great difference in the susceptibility of different individuals, some becoming rapidly and intensely affected, others slowly and feebly so.

I am aware that some say they have tried my mode, and failed to produce the phenomena. The reason, I presume, is simply this. They will not believe the necessity of complying with the WHOLE of the conditions I have distinctly insisted on. But, in all fairness, if they do not comply with the WHOLE conditions, they have no right to expect the promised

results, nor to be disappointed because they fail. If the patient and operator comply in *all* respects as I direct, success is almost certain ; but, on the contrary, he is almost equally certain to fail if *all* the conditions are not *strictly* complied with.

When we consider the great difficulty to some persons of abstracting their minds, and the greater difficulty of ensuring that patients operated on in a public room shall be able to abstract their minds entirely from the circumstances with which they are surrounded, and from other considerations concentrate their ideas entirely on the subject in hand, and the equally great difficulty of securing absolute quiet where a large number of people are assembled, and the extreme quickness of hearing when patients are passing into the hypnotic state, which makes them liable to be roused by the slightest noise, it must be evident, that a public lecture-room is by no means a favourable place for operating on patients for the first time.

Prosecuting the investigation, as I have been doing, by experiments and observations, I have, as might be expected, had occasion to modify and alter some of my views and manipulations ; but still the principle remains the same.

CHAPTER II.

Mode of Hypnotizing — Circumstances necessary to be complied with — Peculiar phenomena which follow; excitement first, and afterwards depression of function — Importance of attending to this — How these may be made to alternate with each other — Extraordinary influence of a current of air during Hypnotism — Reasons for certain modifications of original modes of operating — Hypnotism proceeds from a law of the animal economy — Arises from the physical and psychical condition of the patient, and not from any emanation or principle proceeding from others — Example for proof — Exhibits no appreciable electric or magnetic change. — Two patients may hypnotize each other by contact. — Phenomena arise spontaneously in course of disease. — Mr Wakley's admission on this point. — Mr H. Mayo's testimony as to the effects of Hypnotism. — Effects of different positions of the eyes. — Remarks on articles in Medical Gazette. — Consensual adjustment of eyes. — Effects on size of pupil. — Power of habit and imagination. — Docility of patients, and exalted sensibility, and their effects. — Patient hypnotized whilst operating on another. — Mode of resisting influence.

I now proceed to detail the mode which I practise for inducing the phenomena. Take any bright object (I generally use my lancet case) between the thumb and fore and middle fingers of the left hand; hold it from about eight to fifteen inches from the eyes, at such position above the forehead as may be necessary to produce the greatest possible strain upon the eyes and eyelids, and enable the patient to maintain a steady fixed stare at the object.* The patient must be made

* At an early period of my investigations, I caused the patients to look at a cork bound on the forehead. This was

to understand that he is to keep the eyes steadily fixed on the object, and the mind riveted on the idea of that one object. It will be observed, that owing to the consensual adjustment of the eyes, the pupils will be at first contracted: they will shortly begin to dilate, and after they have done so to a considerable extent, and have assumed a wavy motion, if the fore and middle fingers of the right hand, extended and a little separated, are carried from the object towards the eyes, most probably the eyelids will close involuntarily, with a vibratory motion. If this is not the case, or the patient allows the *eyeballs* to *move*, desire him to begin anew, giving him to understand that he is to allow the eyelids to close when the fingers are again carried towards the eyes, but that the *eyeballs must be kept fixed in the same position*, and the *mind riveted to the one idea of the object held above the eyes.* It will generally be found, that the eyelids close with a *vibratory* motion, or become spasmodically closed. After ten or fifteen seconds have elapsed, by gently elevating the arms and legs, it will be found that the patient has a disposition to retain them in the situation in which they have been placed, if *he is intensely affected.*

a very efficient plan with those who had the power of converging the eyes so as to keep them *both steadily* directed on the object. I very soon found, however, that there were many who could not keep *both* eyes steadily fixed on *so near* an object, and that the result was, that such patients did not become hypnotized. To obviate this, I caused them to look at a more distant point, which, although scarcely so rapid and intense in its effects, succeeds more generally than the other, and is therefore what I now adopt and recommend.

If this is not the case, in a soft tone of voice desire him to retain the limbs in the extended position, and thus the pulse will speedily become greatly accelerated, and the limbs, in process of time, will become quite rigid and involuntarily fixed. It will also be found, that all the organs of special sense, excepting sight, including heat and cold, and muscular motion, or resistance, and certain mental faculties, are at *first* prodigiously *exalted*, such as happens with regard to the primary effects of opium, wine, and spirits. After a certain point, however, this exaltation of function is followed by a state of depression, far greater than the torpor of *natural* sleep.* From the state of the most profound torpor of the organs of special sense, and tonic rigidity of the muscles, they may, at this stage, *instantly* be restored to the *opposite* condition of extreme mobility and exalted sensibility, by directing

* I wish to direct especial attention to this circumstance, as from overlooking the fact of the *first* stage of this artificial hypnotism being one of *excitement*, with the possession of *consciousness* and *docility*, many imagine they are *not* affected, whilst the acceleration of pulse, peculiar expression of countenance, and other characteristic symptoms, prove the existence of the condition beyond the possibility of a doubt, *to all who understand the subject.* I consider it very imprudent to carry it to the ulterior stage, or that of torpor, at a *first* trial. Moreover, there is great difference in the susceptibility to the neuro-hypnotic impression, some arriving at the state of rigidity and insensibility in a few minutes, whilst others may readily pass into the *primary* stage, but can scarcely be brought into the ulterior, or rigid and torpid state. It is also most important to note, that many instances of remarkable and permanent cures have occurred, where it has never been carried beyond the state of consciousness.

a current of air against the organ or organs we wish to excite to action, or the muscles we wish to render limber, and which had been in the cataleptiform state. By mere repose the senses will speedily merge into the original condition again. The *modus operandi* of the current of air producing such extraordinary effects, I acknowledge myself quite unable to explain, but I have no difficulty in producing and reproducing the effects by the same means, whether performed by myself or others, and whether the current of air is from the lips, from a pair of bellows, or by the motion of the hand, or any inanimate object. The extent and abruptness of these transitions (see page 63) are so extraordinary, that they must be seen before the possibility is believed.

An abrupt blow, or pressure over the rigid muscle, will de-hypnotize a rigid part; but, I have found pressing the nose will not restore smell, unless very gentle and continued, nor will pressing a handkerchief against the ear restore hearing when the ear has become torpid, nor will *gentle* friction over the skin restore sensibility to the dormant skin, or mobility to the rigid muscles underneath, (unless so gentle as to be titillation, properly so called,) and yet a slight puff of wind will *instantly* rouse the whole to abnormal sensibility and mobility: a fact which has perplexed and puzzled me exceedingly.

At first I required the patients to look at an object until the eyelids closed of themselves, involuntarily. I found, however, that in many cases this was followed by pain in the globes of the eyes, and slight inflammation of the conjunctival membrane. In order to avoid this, I now close the eyelids, when the impression on the pupil already referred

to has taken place, because I find that the *beneficial* phenomena follow this method, provided the eyeballs are kept fixed, and thus, too, the unpleasant feelings in the globes of the eyes will be prevented. Were the object to produce astonishment in the person operated on, by finding himself unable to open his eyes, the former method is the better; as the eyes once closed it is generally impossible for him to open them; whereas they may be opened for a considerable time after being closed in the other mode I now recommend. However, for curative purposes, I prefer the plan which leaves no pain in the globes of the eyes.

In fine, from a careful analysis of the whole of my experiments, which have been very numerous, I have been led to the following conclusion: — That it is a law in the animal economy, that by a continued fixation of the mental and visual eye, on any object which is not of itself of an exciting nature, with absolute repose of body, and general quietude, they become wearied; and, provided the patients rather favour than resist the feeling of stupor of which they will soon experience the tendency to creep upon them, during such experiments, a state of somnolency is induced, accompanied with that condition of the brain and nervous system generally, which renders the patient liable to be affected, according to the mode of manipulating, so as to exhibit the hypnotic phenomena. As the experiment succeeds with the blind, I consider it not so much the optic, as the sentient, motor, and sympathetic nerves, and the mind through which the impression is made. I feel so thoroughly convinced that it is a law of the animal economy that such effects should follow such condition of

mind and body, that I hesitated not to give it as my deliberate opinion, that this is *a fact* which cannot be controverted. As to the *modus operandi* we may never be able to account for that in a manner so as to satisfy all objections; but neither can we tell why the law of gravitation should act as experience has taught us it *does* act. Still, as our ignorance of the cause of gravitation acting as it is known to do, does not prevent us profiting by an accumulation of the facts known as to its results, so ought not our ignorance of the *whole* laws of the hypnotic state to prevent our studying it practically, and applying it beneficially, when we have the power of doing so.

I feel confident that the phenomena are induced solely by an impression made on the nervous centres, by the physical and psychical condition of the patient, irrespective of any agency proceeding from, or excited into action by another — as any one can hypnotize himself by attending strictly to the simple rules I lay down ; and the following is a striking example of the fact, which was communicated to me and two other gentlemen, by a most respectable teacher. He found that a number of his pupils had been in the habit of hypnotizing themselves, and he had ordered them to discontinue the practice. However, one day he ascertained a girl had hypnotized herself by looking at the wall, and that her companions had put a pen in her hand, with which she had written the word "Manchester;" and she held the pen very firmly — in fact the fingers were cataleptiformly rigid. He spoke to her in a gentle tone of voice, and called her. She arose and advanced towards him, and when awoke, was not aware he had called her, or of what had passed.

I have also had the state of the patient tested

before, during, and after being hypnotized, to ascertain if there was any alteration in the magnetic or electric condition, but although tested by excellent instruments, and with great care, no appreciable difference could be detected. Patients have been hypnotized whilst positively, and also whilst negatively, electrified, without any appreciable difference in the phenomena; so that they appear to be excited independently of electric or magnetic change. I have also repeatedly made two patients hypnotize each other, at the same time, by personal contact. How could this be reconciled with the theory of a special influence transmitted being the cause of the phenomena, *plus* and *minus* being equally efficient?

It is also well known, that occasionally the phenomena arise spontaneously in the course of disease.

It is now admitted even by the editor of the Lancet, one of the greatest opponents of mesmerism, in the leading article of 4th February, 1843, that the phenomena "are wonderful only to those who are unacquainted with the aspects of disease;" and "that we continually see patients labouring under hysteria, and analogous forms of nervous disease, falling suddenly into various states of stupor, trance, and convulsion, without *any* assignable cause." When it is acknowledged that such effects as those named, may spring from such slight influences as to be said to arise "*without any assignable cause*," can it be wondered at that important changes may be induced by acting on the nervous system in the way I have adopted, of which Mr Herbert Mayo, (whose competence to give an opinion on *any* physiological subject no one will question, and who himself publicly submitted to be

operated on by me,) observed, in the course of our correspondence, that it induces "a feeling of stupor, which any one may observe has a disposition to creep upon him, when he tries your experiment of looking fixedly at an object as you direct."

I thought it desirable, therefore, to adopt the name I did, for the reasons explained in the introduction.

A patient may be hypnotized by keeping the eyes fixed in *any* direction. It occurs most *slowly* and *feebly* when the eyes are directed straight forward, and most *rapidly* and *intensely* when they can be maintained in the position of a double internal and upward squint.*

* It is not a little amusing to find any one try to distort so greatly, by garbled statements, the plain meaning of an author, as to make it appear that a writer of some articles on Animal Magnetism, in the Medical Gazette in 1833, was well acquainted with my mode of operating. He observes at page 856, "On the majority of persons no influence whatever is exhibited." How does this coincide with the general success of my mode as stated at page 24? "On those least affected a number of anomalous slight symptoms are produced." He then describes those "feelings of heat and cold, and those of creeping and trembling," which, he adds, "are only the usual imaginary feelings which most persons have if their attention be strongly directed to any particular part of the body, more especially if (as is generally the case with magnetic patients,) something is expected to occur." Such are the symptoms attributed by this writer to "attention," but are these the symptoms or phenomena induced by Hypnotism, as stated in Chapter IV.? Or is there the slightest similarity in the cause? In this author's view it is the result of "attention strongly directed *to different parts of the body*," whereas mine is by attention rivetted to something *without* the body. The

It is now pretty generally known, that during the effort to look at a very near object, there is produced, according to the direction of the object, a double internal squint, or double internal and downward or upward squint, and the pupils are thereby powerfully contracted. I am not aware, however, that it has been recorded, that by directing the eyes loosely,

best mode of gathering the opinion of an author appears to me to be that of his summing up at the conclusion of his subject. Now, at page 1037, the subject is concluded by the following observations: — "This, then, is our case. Every credible effect of magnetism has occurred, and every incredible *is said* to have occurred in cases where no magnetic influence has been exerted, but in all which excited imagination, irritation, or some powerful mental impression, has operated: where the mind has been alone acted on, magnetic effects have been produced without magnetic manipulations: where magnetic manipulations have been employed, unknown, and therefore without the assistance of the mind, no result has ever been produced." Now, can any thing more be required than this, to prove that this writer, as well as Bertrand, adheres to the theory of imagination? Such was the impression left on my mind by reading these papers when they were published; and, together with Wakley's experiments, determined me to consider the whole as a system of collusion or illusion, or of excited imagination, sympathy, or imitation. I therefore abandoned the subject as unworthy of farther investigation, until I attended the conversazioni of Lafontaine, where I saw one fact, the inability of a patient to open his eyelids, which arrested my attention; I felt convinced it was not to be attributed to any of the causes referred to, and I therefore instituted experiments to determine the question; and exhibited the results to the public in a few days after.

upwards or downwards, to the right or to the left, as if looking at a very distant object, the pupils become very much *dilated*, irrespective of the quantity of light passing to the retina ; so that in this manner we can contract or dilate the pupil at will. To those who consider the movement of the iris as the mere effect of irritability, I may observe, in that view, the former position increases, the latter diminishes, the irritability. I may farther remark, if the eyes are *much strained* in ANY direction, I think the pupils will be found to contract as a consequence.

It is important to remark, that the oftener patients are hypnotized, from association of ideas and habit, the more susceptible they become ; and in this way they are liable to be affected *entirely through the imagination.* Thus, if they consider or imagine there is something doing, although they do not see it, from which they are to be affected, they *will become affected ;* but, on the contrary, the most expert hypnotist in the world may exert all his endeavours in vain, if the party does not expect it, and mentally and bodily comply, and thus yield to it.

It is this very circumstance, coupled with the extreme docility and mobility of the patients, and extended range and extreme quickness of action, at a certain stage, of the ordinary functions of the organs of sense, including heat and cold, and muscular motion, the tendency of the patients in this state to approach to, or recede from, impressions, according as their intensity or quality is agreeable or the contrary, which I consider has misled so many, and induced the animal magnetizers to imagine they could produce

their effects on patients at a distance, through mere volition and secret passes.*

* In the Medical Times of 26th March, 1842, I published a letter on this subject, from which I make the following extracts : —

" The supposed power of seeing with other parts of the body than the eyes, I consider is a misnomer, so far as I have yet personally witnessed. It is quite certain, however, that some patients can tell the shape of what is held at an inch and a half from the skin, on the back of the neck, crown of the head, arm, or hand, or other parts of the body, but it is from *feeling* they do so ; the extremely exalted sensibility of the skin enabling them to discern the shape of the object so presented, from its tendency to emit or absorb caloric. This, however, is not *sight*, but *feeling*.

" In like manner I have satisfied myself and others, that patients are drawn, or induced to obey the motions of the operator, not from any peculiar inherent magnetic power in him, but from their exalted state of feeling enabling them to discern the currents of air, which they advance to, or retire from, according to their direction. This I clearly proved to be the case to-day, and that a patient could feel and obey the motion of a glass funnel passed through the air at a distance of *fifteen feet*.

To remove all sources of fallacy as to the extent of influence exercised by the patient herself, independently of any personal or mental influence on my part, whilst I was otherwise engaged, my daughter requested the patient to go into a room by herself, and, when alone, try whether she could hypnotize herself. In a short time I was told the patient was found fast asleep in my drawing-room. I went to her, bandaged her eyes, and then, with the glass funnel, (which I used to avoid the chance of electric or magnetic influence being passed from my person to that of the patient,) elevated, or drew up her arms, and then her whole body. I now

It would be difficult to adduce a more striking example than the following of the fact, that the phenomena are produced by the fixation of the mind and eyes, and general repose of the patient, and not from

retired fifteen feet from her, and found every time I drew the funnel *towards* me, she approached nearer, but when it was forced sharply *from me*, she invariably retired ; and if it was moved laterally, she moved to the right or left accordingly. I now continued drawing the funnel so as to keep up the currents towards the door, and in this way, her arms being extended, and eyes bandaged, she followed me down stairs and up again, a flight of twenty-two steps, with the peculiar characteristic caution of the somnambulist. After arriving at the top of the stair, I allowed her to stand a little, and again began the drawing motion. She evidently felt the motion, and attempted to come, but could not. I now endeavoured to lead her by the hand, but found that *the legs had become cataleptiform, so that she could not move.* I now carried her into the drawing-room, and, after she was seated on a chair, awoke her. She was quite unconscious of what had happened, and could not be made to believe she had been down stairs — said she was quite sure she could have done no such thing without falling — and to this moment believes we were only hoaxing her by saying she had had such a ramble.

"I had repeatedly performed this experiment with this patient and others before, with the same result in all respects but walking up and down stairs ; and proved their readiness to be drawn by others equally as myself when in that state ; so that I consider it quite evident to any unprejudiced person, that a patient can hypnotize himself independently of any personal influence of another ; and that it is by extreme sensibility of the skin, and docility of the patients, that they are drawn after an operator, rather than by magnetic attraction ; and that the power of discriminating objects held near the

imagination, or the look or will of another. After my lecture at the Hanover Square Rooms, London, on the 1st of March, 1842, a gentleman told Mr Walker, who was along with me, that he was most anxious to

skin in different parts of the body, is the result of *feeling*, and *not of sight*.

"The moment I witnessed the attempts of a celebrated professor *to draw a patient*, I formed my opinion of the *cause*; — that it arose from currents of air produced by his hand, together with the extreme sensibility of the skin, and docility of the patients when in that state; and my experiments have clearly proved this, *some patients acknowledging the fact*.

"It may be interesting to remark, that whilst passing up and down stairs the door bell rang, which produced such a tremor through the whole frame as nearly caused the patient's fall — a fact quite in accordance with the effect of any abrupt noise on NATURAL *somnambulists*."

It is owing to this extreme sensibility of the skin during hypnotism, that patients may walk through a room blindfolded, without running against the furniture — the difference of temperature, or rather degree of conducting power of objects, and the resistance of the air directing them.

I have frequently illustrated this with very sensitive patients in the most beautiful and satisfactory manner, thus: By throwing any fragrant and agreeable scent on a bare table the patients will approach, anxious to smell it, but are repelled before they come quite close to the cold table. Place a handkerchief on the table, on which place the scent, and now the patient will approach close to it, and revel in its fragrance. Remove the handkerchief, and the attractive and repulsive movements will again ensue.

This was beautifully illustrated at a private conversazione at my house lately, in the presence of several medical and other eminently scientific gentlemen. Two patients were

see me, that I might try whether I could hypnotize him. He said both himself and friends were anxious he should be affected, but that neither Lafontaine nor others who had tried him, could succeed. Mr Walker said, if that is what you want, as Mr Braid is engaged otherwise, sit down, and I will hypnotize you myself in a minute. When I went into the room I observed what was going on, the gentleman sitting staring at Mr Walker's finger, who was standing a little to the right of the patient, with his eyes fixed steadily on those of the latter. I passed on, and attended to something else, and when I returned a little after, found

hypnotized, when one became so enamoured of the scent of a gentleman's snuff-box as to follow him round the room. He then laid the box about eighteen inches from the edge of an uncovered table, when she advanced, her arms being extended, anxious to reach the box, but when about ten or twelve inches from it, she started back, from perceiving the impression of the cold table at that distance. She now made another attempt to approach the box, being attracted by the fragrance of its contents, but was as speedily repelled by the cold table before she approached it, and now kept bobbing over the box, much in the same manner as I have witnessed in the attempts of a hungry dog to partake of very hot food. The other patient, in passing round the table, also caught the smell of the box, and advanced from another point, and thus both kept bobbing over it, much to the amusement of all present. I now covered the table with a handkerchief, and placed the box on it, when they instantly approached close to it, and seemed to feast on its fragrance; on removing the handkerchief they withdrew, and commenced bobbing over it as at first. The former patient had never seen such experiments, or been tested in this way before.

Mr Walker standing in the same position *fast asleep, his arm and finger in a state of cataleptiform rigidity*, and the patient wide awake, and staring at the finger all the while. After I had roused Mr Walker, the gentleman observed, "this is really very strange, that no one can mesmerise *me;* I must have extraordinary powers of resistance." I requested him to stay a little, and I would try what I could do for him when all was quiet. In three minutes I had him asleep, and in a little more quite rigid. The following reasons may be assigned for my success after Mr Walker had so signally failed. He tried it whilst there were several people in the room, who were moving about and talking; I took care not to commence till all was quiet—Mr Walker had not taken the precaution to make the patient direct his eyes in the best possible manner, but I was careful that he should do so. Moreover, although Mr Walker had not succeeded in putting him into the somnolent condition, he had, no doubt, partially affected him, and the influence had not entirely passed off when I began my operation. Two days after, Mr Walker accompanied me when I called on one of the most celebrated mesmerizers in Europe, who, during our conversation, stated, that a glance of the eye was quite enough, in many cases, to produce the effects. During our conversation, I presume, he had determined to surprise both Mr Walker and myself, by keeping his large intellectual eyes fixed on Mr Walker. The latter, however, suspecting what was intended, and knowing my opinion as to the mode of *resisting* the influence of *such fascination*, kept his eyes moving, and his mind roaming, and thus frustrated the volition of one of the most energetic minds,

and the glances and fascination of one of the finest pair of eyes imaginable for such a purpose. I must remark, that Mr Walker was once magnetized by M. Lafontaine, after having been several times operated on by me, a circumstance which of course would render him more susceptible to the influence of the animal magnetizers' modes of operating, according to their own theory. Had Mr Walker believed in the power, I know he would have become affected, even supposing the gentleman referred to had no such intention, — and I am not prepared to say he had. Mr Walker, however, firmly believed he was trying to mesmerize him by the fascination referred to; but, relying on my opinion, and acting accordingly, he escaped. In order to shew the efficacy of my simple plan, in a short time after, in the presence of the same gentleman, I requested Mr Walker to hypnotize himself. By simply fixing his eyes and mind this was accomplished in about a minute.

CHAPTER III.

Phenomena of natural sleep, dreaming, and somnambulism contrasted — Causes of common sleep — Of dreaming — Effects of variety and monotony compared — Changes alleged to take place in the structure of the brain by exertion — Cause of Hypnotism, M'Nish's article on "Reverie" compared with Mr Braid's theory of Hypnotism — Mode of arousing patients from the state of Hypnotism.

I CONSIDER it unnecessary, in this treatise, to enter into a *detailed* account of the ordinary phenomena of sleep, dreaming, and somnambulism, as contrasted with the waking state. Suffice it to say, the waking condition is that of mental and bodily activity, during which we are enabled to hold communion with the external world, by perceiving the ordinary impressions of appropriate stimuli through the organs of special sense, and of exercising the power of voluntary motion, and the mental functions generally. The state of *profound* sleep is exactly the *reverse* of this — a state of absolute *un*consciousness of all that is going on around, and suspension of voluntary motion, and intellectual activity. In as far as regards the organs of special sense, and voluntary motion, and a temporary suspension of the mental energies, it is the emblem of death.

Between these extreme points there are *gradual*

transitions, so that there are all possible varieties of condition imaginable, from the highest state of mental and bodily activity, to absolute torpor of both. There are two conditions, however, to which I may *briefly* advert,—that of dreaming and of somnambulism. In the former there are some of the mental and bodily functions in a state of partial activity, but, from the sensations arising from external stimuli being perceived very imperfectly, erroneous impressions are conveyed to the mind; and, as happens in some cases of insanity, the power of controlling the current of thought being absent, one idea excites another, until the most incongruous combinations are produced in many instances. Somnambulism, properly so called, is a state still more nearly allied to the waking condition than dreaming. The mental functions are more awake, a more just estimate of external impressions can be formed, and there is the power of voluntary motion present in a remarkable degree. Persons in this state are thus capable of being directed by those around, into certain trains of thought and action. The principal difference between the natural somnambulists, and those who become so through hypnotizing in the manner pointed out in this treatise, is the greater tendency of the latter to lapse into a state of *profound* sleep, unless prevented by being roused and directed by those present. Natural somnambulists seem to be impelled to certain trains of action by *internal* impulses; but, so far as I have seen, the artificial somnambulists have an inclination to remain at absolute rest, unless excited to action by some impression from without. In compliance with such excitement, however, they evince great acuteness

and docility. There is also another remarkable difference. It is stated, that although natural somnambulists cannot remember, when awake, what they were engaged in when asleep, they have a vivid recollection of it when in that state again ; but I have found no parallel to *this* in the somnambulism induced by hypnotism.

By this I mean that they cannot explain what happened during the former somnambulic state, but they may approximate to the words and actions which had formerly manifested themselves, provided they are placed under exactly similar circumstances. For the extent to which peculiar manifestations may be brought out by manipulating the head and face, at a certain stage of hypnotism, see Chapter VI. where examples are given of memory as regarded events which happened during the *waking* condition, whilst they seemed to have no recollection of what happened during a former state of hypnotism.

As to the causes of common sleep, I may remark, that, by the exercise of the mental operations, and the impressions conveyed through the organs of special sense, muscular effort, and the discharge of other animal functions, the brain becomes exhausted, and ceases to be affected by ordinary stimuli, and lapses into that dormant state we call sleep. During this condition it becomes recruited, and fitted for again receiving its wonted impressions through the organs of sense, and of holding intercourse with external nature, and exercising those powers of voluntary motion and mental function peculiar to the waking condition.

It will be generally admitted, that the most refreshing, and therefore the *most natural* sleep, accompanies that condition or languor which follows the *moderate* exercise or fatigue of *all* the bodily and mental functions, rather than an undue exercise of *one* or *more* to the neglect of the others. It is long since it was observed that inordinate attention to one subject caused *dreaming*, instead of *sound sleep*. It will also be found that the absolute length of time during which any function may be exercised, depends very much on the *continuity* of its exertion, or its alternation with that of other functions; thus the mind may become confused and bewildered by continuing one particular study for a length of time, but may be able to return to it with energy and advantage, and prosecute the subject longer on the whole, by varying it with study of a different nature; moreover, bodily disease, and even insanity, frequently arises from allowing the mind to be occupied inordinately by one particular object or pursuit, whether that may be religion politics, avarice, schemes of ambition, or any other passion, emotion, or object of unvaried contemplation.

In like manner, continued and over-intense muscular effort very soon exhausts the power of the muscles so exercised or over-exerted; and by keeping the eyes steadily and constantly exercised by gazing on a coloured spot, they soon cease to be able to discern the boundaries of the respective colours,* and ultimately seem scarcely to be capable of distinguish-

* Müller.

ing the spot at all. The same might be proved of the other senses. In fine, *alternate action and repose is the law of animated nature.**

* This subject is beautifully illustrated by Müller, at page 1410, Vol. II. (Baly's translation,) which I now quote. "The excitement of the organic processes in the brain which attends an active state of the mind, gradually renders that organ incapable of maintaining the mental action, and thus induces sleep, which is to the brain what bodily fatigue is to other parts of the nervous system. The cessation or remission of mental activity during sleep, in its turn, however, affords an opportunity for the restoration of integrity to the organic conditions of the cerebrum, by which they regain their excitability. The brain, whose action is essential to the manifestation of mind, obeys, in fact, the general law which prevails over all organic phenomena,—that the phenomena of life being particular states induced in the organic structures, are attended with changes in the constituent matter of these structures. Hence, the longer the action of the mind is continued, the more incapable does the brain become of supporting that action, and the more imperfectly are the mental processes performed, until at length sensations cease to be perceived, notwithstanding the impressions of external stimuli continue. This is entirely analogous to what frequently occurs during the waking state, in the case of individual sensations."

I must beg leave to take one exception to the correctness of these remarks, and that is, *moderate* exercise, I consider, instead of *exhausting*, seems rather to act *as a salutary stimulus*, and thus *strengthens* both *organ and function*. He then goes on to state, most lucidly and fairly, "Nor merely the action of the mind, but the long continued exertion of other functions of animal life, such as the senses or muscular actions, induces the same exhaustion of the organic states of

It is on this very principle, of over-exerting the attention, by *keeping it riveted to one subject or idea*

the brain, aud thereby want of sleep and sleep itself; for these different systems of the body partieipate in the ehange whieh the organie eondition of any one of them may undergo. Lastly, impairment of the normal organie state of the brain, by the eireulation through it of blood eharged with imperfeetly assimilated nutriment, as after full meals in whieh spirituous drinks have been taken, also induees sleep. The nareotie medieaments act still more strongly by the ehange they produee in the organie eomposition of the sensorium. Even the inereased pressure of the blood upon the brain, produeed by the horizontal posture, may beeome the eause of sleep."

Here then is the opiniou of this author in a few words. The exereise of funetion is attended with a ehange, deterioration, or wasting of the organie strueture at a more rapid rate than ean be repaired by the slow, but regular and persistent organie renovation eontinually going on in the whole system. A eessation of sentient, and mental, and museular funetions, therefore, as happens iu sleep, beeomes neeessary to afford time for the renovation of the deteriorated organie struetures of the respeetive organs, and of the brain iu partieular, whieh, in so eminent a degree, sympathizes and partieipates in the organie ehanges whieh have been indueed in other organs.

Liebig's views seem eonfirmatory of this, where he points out the faet, that the ehemieal prineiples of those substanees whieh aet most energetieally on the braiu and nerves have a eomposition analagous to that of the substanee of the brain and nerves, as in the ease of the vegetable alkaloids. He believes that all the aetive prineiples whieh produee powerfully poisonous or medieinal effeets, in minute doses, are eompouuds of nitrogeu; and that those compounds, being resolved into their elements, take a share in the formation, or transformation, of brain and nervous matter.

which is not of itself of an exciting nature, and, over-exercising one set of muscles, and the state of the strained eyes, with the suppressed respiration, and general repose, which attend such experiments, which excites in the brain and whole nervous system that peculiar state which I call Hypnotism, or nervous sleep. The most striking proofs that it is different from common sleep, are the extraordinary effects produced by it. In deep abstraction of mind, it is well known, the individual becomes unconscious of surrounding objects, and in some cases, even of severe bodily inflictions. During hypnotism, or nervous sleep, the functions in action seem to be so *intensely* active, as must in a great measure rob the others of that degree of nervous energy necessary for exciting their sensibility. This alone may account for much of the dulness of common feeling during the abnormal quickness and extended range of action of certain other functions.*

* It was certainly presuming very much on the ignorance of others for any one to attempt so to pervert the meaning of an author, as to twist what M'Nish has written on the article "Reverie," and represent it as the basis of my theory. How does M'Nish define it? "Reverie," he says, "proceeds from an unusual quiescence of the brain, and inability of the mind to direct itself strongly to any one point; it is often the prelude of sleep. There is a *defect* in the *attention*, which, instead of being fixed on *one* subject, *wanders over a thousand*, and even on these is feebly and ineffectively directed." Now this, as every one must own, is the very *reverse* of what is induced by *my plan*, because I *rivet* the *attention* to *one idea*, and the eyes to *one point*, as the *primary* and *imperative conditions*. Then, as to another passage, "That kind of reverie in which the mind is nearly divested of all ideas, and approxi-

The untoward result referred to in the note below, I have no doubt, was the effect of permitting the experiment to be carried too far. No such consequence has ever followed in any of my operations, and for this reason, that I have always watched each case with close attention, and aroused

mates nearly to the state of sleep, I have sometimes experienced while gazing long and intently upon a river. The thoughts seem to glide away, one by one, upon the surface of the stream, till the mind is emptied of them altogether. In this state we see the glassy volume of the water moving past us, and hear its murmur, but lose all power of fixing our attention definitively upon any subject; and either fall asleep, or are aroused by some spontaneous reaction of the mind, or by some appeal to the senses sufficiently strong to startle us from our reverie." Now, I should have read this passage a thousand times without discovering any analogy between it and my theoretical views. They appear to me to be "wide as the poles asunder." Instead of ridding the mind of ideas "one by one, till the mind is *emptied* of them *altogether*," I endeavour to rid the mind at *once* of all ideas *but one*, and to fix *that* one in the mind *even after passing into the hypnotic state*. This is very different from what happens in the reverie referred to, in which M'Nish confesses the difficulty "of fixing our attention definitively upon *any* subject." Again, so far from a reaction of the mind being sufficient to rouse patients from the hypnotic state, as in the reverie referred to, I can only state, that I have never seen patients deeply affected come out of it without assistance; and I heard Lafontaine say, he had been unable to restore the Frenchman who was with him for twelve hours on one occasion, when a surgeon operated on him; and I have read the report of another, who operated on a patient at Stockport, "Charlie," according to my method, and, from having allowed him to go too far, experienced no small difficulty in rousing him, nor

the patient the moment I saw the slightest symptom of danger. I shall, therefore, now point out the symptoms of danger, with the mode of arousing patients, and thus preventing mischief which might ensue from want of due caution in the operator.

could he be restored to speech after much manipulation, and buffetting, and friction, till he had swallowed nearly *half a tumbler glass of neat gin*. To prevent misrepresentation, I shall quote the case as reported in the Stockport Chronicle of 4th February, 1842. — "To the final instance the lecturer now drew particular attention. It was that of a young man, recognized by many in the room by the familiar name of 'Charlie.' He was just entering upon the state of somnolence, and the attention of the audience was directed to the fact, that it was so indicated, by the different members becoming rigid. Presently his eyelids closed, and he became as though apparently under the influence of catalepsy. It was tried to make him sit down, but his whole frame was perfectly rigid, and that object could not therefore be accomplished. He was then laid on the floor, and the usual means, with cold water added, were employed in order to bring him to a state of consciousness. After a time these partially succeeded, his limbs became once more supple, and he was set in a chair, apparently conscious, though his eyelids were not yet open. He was several times requested to open them, and as often made the most vigorous efforts to do so, but was unable; at last they were opened, and it was discovered that the operation had so far influenced the entire functions of his body, that he had for a time lost the power of utterance, the muscles of the throat and tongue still remaining in a state of the most perfect rigidity. In this state, and being affected by a tremor which seized every part of his person, the patient was conducted into an ante-room, and placed before a fire, while the operator continued to rub the parts, in order to excite them to renewed action, and to restore animation. All

Whenever I observe the breathing very much oppressed, the face greatly flushed, the rigidity excessive, or the action of the heart very quick and tumultuous, I instantly arouse the patient, which I have always readily and speedily succeeded in doing by a clap of the hands, an abrupt shock on the arm or leg by striking them sharply with the flat hand, pressure and friction over the eye-lids, and by a current of air wafted against the face. I have never failed by these means to restore my patients very speedily.

I feel convinced hypnotism is not only a valuable, but also a perfectly safe remedy for many complaints, if judiciously used; still it ought not to be trifled with by ignorant persons for the mere sake of gratifying idle curiosity. In all cases of apoplectic ten-

this, however, had not the desired effect for some time, during which the patient evinced feelings of considerable surprise at his condition; but nevertheless was exceedingly lively, and made several efforts to speak, but could not. At last half a tumbler glass of neat gin was brought, the greater portion of which he drank off, and this partially restored the power of utterance, for he was afterwards able to articulate a little, and asked, though only in a whisper, for his hat; and also requested that some water might be mixed with the remaining portion of the gin. He complained also of a sense of excessive fulness of the stomach; and said, in answer to inquiries, that although not feeling cold, he was yet unable to resist the tremor which had seized him."

Was not this a beautiful illustration of the facility with which patients might be roused from this condition "*by a reaction of the mind?*" Nor was this the only case that evening, in which great difficulty had been experienced in rousing patients from the hypnotic state.

dency, or where there is aneurism, or serious organic disease of the heart, it ought not to be resorted to, excepting with the precaution, that it may be in the mode calculated to *depress* the force and frequency of the heart's action.

CHAPTER IV.

Phenomena of common sleep — Of Hypnotism — Power of locomotion and accurate balancing of themselves — Tendency to dance on hearing appropriate music — Grace displayed under its influence — Tendency to become cataleptiformly fixed in any position if left quiet — Probability of Hypnotism having been practised amongst the ancients, and the cause of their superior excellence in sculpture, painting, and dancing — Effects analogous to Nitrous Oxide in some — in what it differs from this and intoxication from wine and spirits — Analogous to conium — Effects of monotonous impressions on any of the senses — Opinions of Cullen, M'Nish, Willich — (Counting and repeating generally known) — A writer in Medical Gazette — Power of habit and expectation — All the phenomena consecutive — Note illustrating this — Power of Hypnotism to cure intractable diseases and disorders — Miss Collins case and Miss E. Atkinson's — Extent to which it may be expected to be useful.

In passing into common sleep objects are perceived more and more faintly, the eyelids close, and remain quiescent, and all the other organs of special sense become gradually blunted, and cease to convey their usual impressions to the brain, the limbs become flaccid from cessation of muscular tone and action, the pulse and respiration become slower, the pupils are turned upwards and inwards, and are *contracted.* (Müller.)

In the hypnotic state, induced with the view of exhibiting what I call the hypnotic phenomena, vision becomes more and more imperfect, the eyelids

are closed, but have, for a considerable time *a vibratory motion*, (in some few they are forcibly closed, as by spasm of the orbicularcs ;) the organs of special sense, particularly of smell, touch, and hearing, heat and cold, and resistance, are greatly *exalted*, and afterwards become blunted, in a degree far beyond the torpor of natural sleep; the pupils are turned upwards and inwards, but, contrary to what happens in *natural* sleep, they are greatly *dilated*, and highly insensible to light; after a length of time the pupils become contracted, whilst the eyes are still insensible to light. The pulse and respiration are, at first, slower than is natural, but immediately on calling muscles into action, a tendency to cataleptiform rigidity is assumed, with rapid pulse, and oppressed and quick breathing. The limbs are thus maintained in a state of tonic *rigidity* for any length of time I have yet thought it prudent to try, instead of that state of flaccidity induced by common sleep; and the most remarkable circumstance is this, that there seems to be no corresponding state of muscular exhaustion from such action.*

* The average of a great number of experiments gives me the following results: The rise in the pulse from mere muscular effort, to enable patients to keep their legs and arms extended for five minutes, is about 20 per cent. When in the state of hypnotism it is upwards of 100 per cent. By arousing all the senses, and the head and neck, it will speedily fall to 40 per cent, (that is, twice what it was when so tested in the natural condition,) and by rendering the whole muscles limber, whilst the patient is in the state of hypnotism the pulse very speedily falls to, or even below, the condition it was before the experiment.

In passing into natural sleep, any thing held in the hand is soon allowed to drop from our grasp, but, in the artificial sleep now referred to, it will be held more firmly than before falling asleep. This is *a very remarkable difference.*

The power of balancing themselves is so great that I have never seen one of these hypnotic somnambulists fall. The same is noted of natural somnambulists. This is a remarkable fact, and would appear to occur in this way, that they acquire the centre of gravity, as if by instinct, in the *most natural, and therefore, in the most graceful manner*, and if allowed to remain in this position, they speedily become cataleptiformly and immoveably fixed. From observing these two facts, and the general tendency and taste for dancing displayed by most patients on hearing lively music during hypnotism, the peculiarly graceful and appropriate movement of many when thus excited, and the varied and elegant postures they may be made to assume by slight currents of air, and the faculty of retaining any position with so much ease, I have hazarded the opinion, that the Greeks may have been indebted to hypnotism for the perfection of their sculpture, and the Fakirs for their wonderful feats of suspending their bodies by a leg or an arm.*

* It has been suggested to me, that it can scarcely be doubted that the Bacchanalians, who had no feeling of wounds, (" non sentit vulnera Mœnas,"—*Ovid*,) and whose condition was a stupor different from common sleep, (" Exsomnis stupet Œvias,"—*Horace*,) were in the hypnotic condition or nervous sleep, and therein excited to dance by music ; and that, as uneducated maid-servants, when under the full influence of the

It thus clearly appears that it differs from common sleep in many respects, that there is first a state of excitement as with opium, and wine, and spirits, and afterwards a state of corresponding deep depression or torpor.

In the case of two patients, symptoms very much the same as those produced in them by the laughing gas, were produced twice on each patient, and the only time I know of their having been hypnotized. One lost the power of speech for two hours, as happened also after the gas. Both these patients had hypnotized themselves. There is a remarkable difference between the hypnotic condition, and that induced by the nitrous oxide. In the latter there is great, almost irresistible inclination to *general muscular effort*, as well as laughter; in the former there seems to be no inclination to *any* bodily effort, unless excited by *impressions from without*. When the latter are used, there is a remarkable difference again in the power of locomotion and accu-

state of nerve, move with the grace and peculiar action of the most accomplished dancers of pantomimic ballet, there is reason to believe, not merely that the perfect grace exhibited in the attitudes represented in ancient sculpture and painting, was derived from studying the Bacchanalian and other mystic dancers, but that the movements used by stage-dancers, in our days, have been transmitted to us by continued imitation, through Italy, from the dancers in the Greek mysteries. No person can see girls of humble education, under the influence of music while in the nervous sleep, without perceiving, that those individuals, if awake, could not move with the elegance they exhibit under that influence. The reason of such grace probably is, that it arises from the simple and pure effects of nature to balance the body perfectly in all its complicated movements while the power of sight is suspended.

rate balaneing of themselves, when eontrasted with the eondition of intoxication from wine or spirits, where the limbs beeome partially paralyzed, whilst the judgment remains pretty clear and acute. The state of muscular quiescenee, with acute hearing, and dreamy, glowing imagination, approximates it somewhat to the eondition induced by eonium.

During the course of last spring some leetures were delivered in this town to prove that the *mesmeric phenomena* might be induced by an "undue continuanee or repetition of the same sensible impression" on *any* of the senses. Immediately after the first leeture I instituted experiments according to this plan, but very soon ascertained, that the sleep induced by this mode of operating, *unless through* the *eye*, was nothing more than NATURAL or common sleep, *excepting in patients who had had the impressibility stamped on them, by having been previously mesmerized or hypnotized.* The lecturer eoncluded his eourse by stating his opinion, that he knew no sleep but natural or common sleep; and by representing that he eonsidered the effects produced by the different modes to be the same.* I believe most, if not all the patients this

* This being his belief, there could be no novelty in his views. The following was the language of Cullen, long before he was born, "If the mind is attached to a single sensation, it is brought very nearly to the state of the total absence of impressions; or, in other words, to the state most closely bordering upon sleep; remove those stimuli which keep it employed, and sleep ensues at any time."

M'Nish also writes, "Attention to a single sensation has the same effect, (of inducing slumber.) This has been exemplified in the case of all kinds of monotony, where there

gentleman exhibited at his lectures had been previously mesmerized or hypnotized, which, if I am correct in this supposition, from the circumstances already

is a want of variety to stimulate the ideas, and keep them on the alert."

And again M'Nish writes, "I have often coaxed myself to sleep by internally repeating half a dozen times any well-known rhyme. Whilst doing so the ideas must be strictly directed to this particular theme, and prevented from wandering." He then adds, that the great secret is to compel the mind to depart from its favourite train of thought, into which it has a tendency to run, "and address itself solely to the *verbal* repetition of what is substituted in its place;" and farther adds, "the more the mind is brought to turn upon a *single impression*, the more closely it is made to approach to the state of sleep, which is the total absence of all impressions." Willich also, some forty years ago, wrote thus, "Sleep is promoted by tranquillity of mind, * * * by *gently and uniformly affecting one of the senses;* for instance, by music or reading; and lastly, a gentle external motion of the whole body, as by rocking or sailing." Counting and repeating a few words have been also long and generally known and resorted to for the purpose of procuring sleep.

Let any one read attentively the following extract from the Medical Gazette of February 24, 1838, on the power of weak monotonous impressions on the senses having the power of inducing sleep, and many phenomena usually attributed to mesmerism, and say what merit could be due to a person acquainted with the article referred to, for *recording a note* to *the same effects some six or eight months thereafter*, and that without having instituted a single experiment to prove the correctness of the hypothesis? "For the other slight symptoms" (others enumerated having been attributed to imagination or emotion of mind) "of vapours, drowsiness, and at last

referred to, (see page 36, and note, page 61,) would completely nullify the importance of his *apparent* results. However, I have never heard of his having *operated successfully, and exhibited the phenomena on numbers of patients taken indiscriminately from a mixed audience, who had never been operated on before;* or produced curative results such as I have so repeatedly done. I therefore consider it a fair inference, that until the same phenomena are produced by his method in cases of persons which have *never* been hypnotized or mesmerized, nothing is proved beyond the fact *which I have so often urged*, namely, the power of

natural sleep, no other cause need be sought than the tediousness and ennui of passing the hands for more or less than an hour over the most sensitive parts of the body. This is only an instance of the well known effect of weak, monotonous impressions on the senses inducing sleep ; analogous examples are found in the soothing influence of a body seen slowly vibrating, or of a distant calm scene, or the motions of the waves, or of quivering leaves ; or in impressions on the sense of hearing by the sound of a waterfall, the rippling of billows, the humming of insects, the low howling of the winds, the voice of a dull reader ; or on the nerves of common sensation by *gentle friction of the temple or eye-brow, or any sensitive part of the body ;* the rocking of a cradle ; any slow and regular motion of the limbs or trunk ; all these instances shew that the effect of monotonous impressions on the senses is to produce, in most persons, tranquillity, or drowsiness, and ultimately sleep."

Where, then, is the great merit of any one having recorded a note six or eight months after this was published, that these phenomena were induced by " the undue continuance and repetition of the same sensible impression ?"

imagination, sympathy, and habit, in producing the expected effects ON THOSE PREVIOUSLY IMPRESSED.*

From overlooking another important fact which I have repeatedly explained, that all the phenomena are consecutive, that is, first increased sensibility, mobility, and docility, and afterwards a subsidence into insensibility and cataleptiform rigidity, this gentleman, by mistaking and exhibiting the *primary* phenomena for the *secondary*, seems to have managed to deceive both himself and some others who are satisfied to look at such matters loosely. *This, however, is confounding things which are in themselves essentially different.* I beg especial attention to the note below.†

* A very decided proof of this was exhibited at one of my lectures, where, as may be seen from the report of it, twenty-two who had been operated on before, laid hold of different parts of each other's persons or dresses, and by concentrating their attention to that act, and anticipating the effect, they all became hypnotized in about a minute. After another lecture, in the ante-room, sixteen who had been hypnotized formerly, stood up in the same manner, and also *one* who *had never been hypnotized.* In about a minute all were affected *excepting the latter.* I then operated on him alone in my usual way, and in two or three minutes he was very decidedly affected. Suffice it to say, I have varied my experiments in every possible form, and clearly proved the power of imagination *over those previously impressed*, as the patients have become hypnotized or not by the same appliance, accordingly to the result which they previously expected. This readily accounts for the result of Mr Wakley's experiments with the Okeys.

† In illustration of this, I may here state the following remarkable facts, which have been frequently repeated before many most competent witnesses, and of which, therefore, I consider there can be no doubt.

Of all the circumstances connected with the artificial sleep which I induce, nothing so strongly marks

The first symptoms after the induction of the hypnotic state, and extending the limbs, are those of extreme excitement of all the organs of sense, sight excepted. I have ascertained by accurate measurement, that the hearing is about twelve times more acute than in the natural condition. Thus a patient who could not hear the tick of a watch beyond 3 feet when awake, could do so when hypnotized at the distance of 35 feet, and walk to it in a direct line, without difficulty or hesitation. Smell is in like manner wonderfully exalted; one patient has been able to trace a rose through the air when held 46 feet from her. May this not account for the fact of Dr Elliotson's patient Okey, discovering the peculiar odour of patients in *articulo mortis?* when she said on passing them, "there is Jack." The tactual sensibility is so great, that the slightest touch is felt, and will call into action corresponding muscles, which will also be found to exert a most inordinate power. The sense of heat, cold, and resistance, are also exalted to that degree, as to enable the patient to feel any thing *without actual contact*, in some cases at a considerable distance, (18 or 20 inches,) if the temperature is very different from that of the body; and some will feel a breath of air from the lips, or the blast of a pair of bellows, at the distance of 50, or even 90 feet, and bend from it, and, by making a back current, as by waving the hand or a fan, will move in the opposite direction. The patient has a tendency to *approach to, or recede from impressions, according as they are agreeable or disagreeable, either in quality or intensity.* Thus, they will approach to soft sounds, but they will recede from loud sounds, however harmonious. A discord, such as two semi-tones sounded at same time, *however soft*, will cause a sensitive patient to shudder and recede when hypnotized, although ignorant of music, and not at all disagreeably affected by such discord when awake. By allowing a little time to

the difference between it and *natural* sleep as the wonderful power the former evinces in curing many

elapse, and the patient to be in a state of quietude, he will lapse into the opposite extreme, of rigidity and torpor of *all* the senses, so that he will not hear the loudest noise, nor smell the most fragrant or pungent odour; nor feel what is either hot or cold, although not only approximated to, but brought into actual contact with, the skin. He may now be pricked, or pinched, or maimed, without evincing the slightest symptom of pain or sensibility, and the limbs will remain rigidly fixed. At this stage a puff of wind directed against any organ *instantaneously* rouses it to inordinate sensibility, and the rigid muscles to a state of mobility. Thus, the patient may be unconscious of the loudest noise, but by simply causing a current of air to come against the ear, a very moderate noise will *instantly* be heard so *intensely* as to make the patient start and shiver violently, although the whole body had immediately before been rigidly cataleptiform. A rose, valerian, or asafœtida, or strongest *liquor ammoniæ*, may have been held close under the nostrils without being perceived, but a puff of wind directed against the nostrils will instantly rouse the sense so much, that supposing the rose had been carried 46 feet distant, the patient has instantly set off in pursuit of it; and even whilst the eyes were bandaged, reached it as certainly as a dog traces out game; but, as respects valerian or asafœtida, will rush *from* the unpleasant smell, with the greatest haste. The same with the sense of touch.

The remarkable fact that the whole senses may have been in the state of profound torpor, and the body in a state of rigidity, and yet by very gentle pressure over the eye-balls, the patient shall be instantly roused to the waking condition, as regards all the senses, and mobility of the head and neck, in short to all parts supplied by nerves originating above the origin of the fifth pair, and those inosculating with them, and

diseases of long standing, and which had resisted *natural* sleep, and every known agency, for years, — *e. g.*

will not be affected by simple mechanical appliance to other organs of sense, is a striking proof that there exists some remarkable connection between the state of the eyes, and condition of the brain and spinal cord during the hypnotic state.

This is also a remarkably good illustration of the propriety of Mr Mayo's designation of the origin of the fifth pair of nerves, which he styles "the dynamic centre of the nervous system."*

Another remarkable proof to the same effect is this ; supposing the same state of torpor of all the senses, and rigidity of the body and limbs to exist, a puff of air, or gentle pressure against ONE eye will restore sight to *that eye*, and sense and mobility to *one half of the body* — the same side as the eye operated on — but will leave the other eye insensible, and the other half of the body rigid and torpid as before. Neither hearing nor smell, however, are restored in this case to either side. Thus, by one mode of acting through the eye, we reduce the patient to a state of hemiplegia, by the other to that of paraplegia, as regards both sense and motion. In many cases, when the patient has been hypnotized by looking sideways, this gives a tendency to the body to turn round in that direction when asleep.

It seemed puzzling, that by acting on one eye, both sense and motion could be communicated to the *same* side of the body, seeing the motor influence is communicated from the *opposite hemisphere of the brain*. It has occurred to me that the partial decussation of the optic nerves may account for this, and that this partial decussation may be for the express purpose of perfecting the union of sensation and motion through the eyes, "on which we lean as on crutches ;" thus

* "The Nervous System, and its Functions," p. 27.

patients who have been born deaf and dumb, of various ages, up to 32 years, had continued without

enabling us to balance ourselves so much more perfectly than we could otherwise have done.

There is another most remarkable circumstance, that whilst the patient is in the state of torpor and rigidity, we may pass powerful shocks of the galvanic battery through the arms, so as to cause violent contortions of them, without his evincing the slightest symptom of perceiving the shocks, either by movement of the head or neck, or expression of the countenance. On partially arousing the head and neck, as by gentle pressure on the eyes, or passing a current of air against the face, the same shocks *will* be felt, as evinced by the movements of the head and neck, the contortions of the face, and the whine, moan, or scream of the patient. All this may happen, as I have witnessed innumerable times, and the patient be altogether unconscious of it when roused from the hypnotic condition.

Moreover, whilst the patient is in the condition to be unconscious of the shock passed through the arms whilst a rod is placed in each hand, if one of the rods is applied to any part of the head, or neck, or face, in short, to any part which is set at liberty by acting on *both eyes*, as formerly referred to, he will instantly manifest symptoms of feeling a shock, though it be much less powerful than that which had failed to produce any sensation or consciousness when passed through both arms. This might readily be accounted for on the principle of the circuit being shortened, and also by one of the rods being nearer the centre of the sensorium ; but that it depends on something else is apparent from the following fact : Without moving the rod placed on the neck, head, or face, carry the other rod *from the hand*, to any other part of the head, neck, or face, and all evidence of feeling will disappear, *unless the power of the galvanic current is increased.*

Analogous to this is another most puzzling phenomenon :

the power of hearing sound until the time they were operated on by me, and yet they were enabled to do so

The brain being in a state of torpor, the limbs rigid, and the skin insensible to pricking, pinching, heat or cold, by gently pressing the point of one or two fingers against the back of the hand, or any other part of the extremity, the rigidity will very speedily give place to mobility, and quivering of the arm, hand, and fingers, and which is greatly increased by pressing another finger against the neck, head, or face. Indeed, in the latter case, the commotion of the whole body is as violent in some patients as from shocks of the galvanic battery. By placing BOTH fingers on any part of the head, face, or neck, the commotion almost, or entirely ceases. By pinching the skin of the hand or arm with one finger and thumb, and the skin of the neck or face with the other, no effect is produced. Pressure, made with insulating rods, glass, or sealing wax, is followed by the same phenomena as when done by the points of the fingers. The flat hand applied has very little effect. The pressure being made against both hands, the arms are contorted, and if the head is partially dehypnotized the patient will complain of pins running into the fingers, especially if one point of contact is the hand, and the other the face or head. These phenomena do not occur whilst the skin remains sensible to pricking or pinching.

Moreover, during the state of cataleptiform rigidity, the circulation becomes greatly accelerated, in many cases it has more than double the natural velocity ; and may be brought down to the natural standard, in most cases in less than a minute, by reducing the cataleptiform condition. It is also found, that it may be kept at any intermediate condition between these two extremes, according to the manipulations used ; and that the blood is circulated with less *force* (the pulse being always contracted) in the *rigid limbs*, and sent in correspondingly greater quantity and force into those parts which are not directly subjected to

by being kept in the hypnotic state for eight, ten, or twelve minutes, and have had their hearing still farther improved by a repetition of similar operations. Now, supposing these patients to have spent six hours out of twenty-four in sleep, many of them had had four, five, six, or eight years of *continuous* sleep, but still awoke as they lay down, incapable of hearing sound, and yet they had some degree of it communicated

the pressure of rigid muscles. It is also important to note, that by acting on both eyes in the manner required to induce the state of paraplegia, as already explained, the force and frequency of the heart's action may be as speedily and perceptibly diminished, as the action of a steam engine by turning off the steam. By again fixing the eyes, its former force and velocity will be almost as speedily restored, as can be satisfactorily proved to any one who keeps his ear applied to the chest during these experiments. The amount of change in the pulse, by acting on the two eyes, and thus liberating the organs of special sense, and the head and neck, is about 60 per cent of the actual rise of the pulse when at the maximum above the ordinary velocity of the circulation. We might therefore, I think, *a priori*, infer, that in this new condition of the nervous system we have acquired an important power to act with.

N.B. — It is to be observed, that owing to the extreme acuteness of hearing during the first stage of hypnotism, it is extremely apt to mislead the operator, or those who do not understand this fact, during operations on the acuteness of the other senses, such as smell, currents of air, and heat and cold. To avoid such mistakes, therefore, it is best to allow the hearing to disappear, by which time all the other senses will have gone to rest, with the exception of the susceptibility to be affected by a current of air. I allow all the senses to become dormant, and then rouse only the one I wish to exhibit in the state of exalted function, when operating carefully.

to them by a few *minutes of Hypnotism*. Can any stronger proof be wanted, or adduced, than this, that it is very different from *common* sleep? A lady, 54 years of age, had been suffering for 16 years from incipient amaurosis. According to the same ratio, she must have had four years of sleep, but instead of improving she was every month getting worse, and when she called on me, could with difficulty read two words of the largest heading of a newspaper. After *eight minutes* hypnotic sleep, however, she could read the other words, and in three minutes more, the whole of the smaller heading, soon after a smaller sized type, and the same afternoon, with the aid of her glasses, read the 118th Psalm, 29 verses, in the small diamond Polyglot Bible, which for years had been a sealed book to her. There has also been a most remarkable improvement in this lady's general health since she was hypnotized. Is there any individual who can fail to see, in this case, something different from common sleep? Another lady, 44 years of age, had required glasses 22 years, to enable her to see to sew, read, or write. She had thus five years and a-half of sleep, but the sight was still getting worse, so that, before being hypnotized, she could not distinguish the capitals in the advertising columns of a newspaper. After being hypnotized, however, she could, in a few minutes, see to read the large and second heading of the newspaper, and next day, to make herself a blond cap, threading her needle WITHOUT the aid of glasses. This lady's daughter, who had been compelled to use glasses for two years, was enabled to dispense with them, after being *once* hypnotized. It is also important to note, that all

these three, as well as many others, were agreeably surprised by improvement of *memory* after being hypnotized. The memory of one was so bad that she was often forced to go up stairs several times before she could remember what she went for, and could scarcely carry on a conversation ; but all this remnant of a slight paralytic affection is gone, by the same operations which roused the optic nerves, and restored the sight. Now, with such cases as these, who can doubt that there is a real difference in the state of the brain and nervous system generally, during the hypnotic sleep, from that which occurs in common sleep? The same might be urged from various other diseases cured or relieved by this process, but I shall only briefly refer to a few.

In the second part of this treatise, where the cases are recorded, will be found many examples of the curative power of hypnotism, equally remarkable with those to which I have just referred : such as Tic Douloureux ; Nervous headach ; Spinal irritation ; Neuralgia of the heart ; Palpitation and intermittent action of the heart ; Epilepsy ; Rheumatism ; Paralysis ; Distortions and tonic spasm, &c.

I shall here give a few particulars of a case which shews in a most remarkable degree the difference of this and common sleep, or that induced by opium and the whole range of medicines of that class. Miss Collins, of Newark, Nottinghamshire, had a spasmodic seizure during the night, by which her head was bound firmly to her left shoulder. The most energetic and well directed means, under a most talented physician, and aided by the opinion of Sir Benjamin

Brodie, had been tried, as far as known remedies could be carried, (amongst other means, narcotics, in as large doses as were compatible with the safety of the patient;) and although she was carefully watched by night and by day, there had never been the slightest relaxation of the spasm, which had continued nearly six months. When I first examined her, no force I was capable of exerting could succeed in separating the head and shoulder in the slightest degree. Experience led me to hope, however, that I might be able to do so after she was hypnotized. Having requested all present, excepting the patient, her father, and her physician, to retire, I hypnotized her, and in three minutes from commencing the operation, with the most perfect ease to myself, and without the slightest pain to the patient, her head was inclined in the opposite direction, and in two minutes more she was roused, and was quite straight. I visited this patient only three times, after which she returned home. Shortly afterwards, she had a nervous twitching of the head, and on one occasion it was again drawn down to her shoulder. Dr Chawner, however, hypnotized her as he had seen me do, and put it right immediately; and she is now (about twelve months after she was hypnotized) in perfect health, "her head quite straight, and she has perfect control over the muscles of the neck." (See cases.)

Miss E. Atkinson had been unable to speak above a whisper for four years and a half, notwithstanding every known remedy had been perseveringly adopted, under able practitioners. After the ninth hypnotic operation she could speak aloud without effort, and

has continued quite well ever since — now about nine months. (See case at length, Part II.)

The extraordinary effects of a few minutes hypnotism, manifested in such cases (so very different from what we realize by the application of ordinary means) may appear startling to those unacquainted with the remarkable powers of this process. I have been recommended, on this account, to conceal the fact of the rapidity and extent of the changes induced, as many may consider the thing *impossible*, and thus be led to reject the *less* startling, although *not more* true, reports of its beneficial action in other cases. In recording the cases, however, I have considered it my duty to record *facts as I found them*, and to make no compromise for the sake of accommodating them to the preconceived notions or prejudices of others.

It may be proper to add, however, that I have afforded opportunities to many eminent professional and scientific gentlemen to see the patients, and investigate for themselves the real state of these respective cases; and to them I can confidently appeal as to the accuracy and fidelity of the reports of most of the cases recorded in this treatise.

After such evidence as this, no one can reasonably doubt that there is a remarkable difference between hypnotism and natural sleep, and that it is a valuable addition to our therapeutic means.

How these extraordinary effects are produced, it may be impossible absolutely to decide. One thing, however, I am certain of, that, in this condition, besides the peculiar impression directly made on the nervous centres, by which the mind is for the time "thrown out of gear," and which enables us,

in a remarkable manner, to localize or concentrate the nervous energy, or sensorial power, to any particular point or function, instead of the more equal distribution which exists in the ordinary condition, we have also an extraordinary power of acting on the capillaries, and of increasing and diminishing the force and frequency of the circulation, locally and generally.* This can be done in a most remarkable degree, both as regards the extent and rapidity of these changes. † And, moreover, changes from abso-

* By this I mean that any one examining the pulse by the radial artery, whilst the patient has his arms in the cataleptiform condition, and held at right angles with his body, (and when, of course, the circulation can only be influenced by the state of rigidity or flaccidity of the muscles,) it will be found feeble or contracted, but the moment the rigidity of the muscles is reduced, by blowing on or fanning them, the pulse will become much more developed. This, of course, which may be done without the patient being conscious of the experiment, is totally different from what may be displayed as a trick, by a person voluntarily compressing the axillary and brachial arteries, by drawing his arm firmly against his side. The former is independent of volition, the latter is entirely voluntary, and a mere trick.

† The first time I ever had an opportunity of examining a patient minutely, or of feeling the pulse of one, under the mesmeric influence, was on the 19th November, 1841. I was much struck with the state of the pulse at the wrist — so small and rapid as, combined with the state of tremor, or slight subsultus in the arm, rendered it impossible to count it accurately at the wrist. This circumstance induced me to reckon the velocity of the pulse by the carotid artery, as will be found recorded in the "Manchester Guardian" of the 24th of that month. I adduced this as the cause of the discrepancy

lute insensibility to the most exalted sensibility, may be effected at a certain stage, almost with the rapidity of thought, as exemplified at page 63. On the whole, I consider it is of great importance to have acquired a knowledge of how these effects can be produced and generally applied, and turned to advantage in the cure of disease, although we should never ascertain the real proximate cause, or principle through which we produce our effects. Who can tell how, or why, quinine and arsenic cure intermittent fever? They are, nevertheless, well known to do so, and are prescribed accordingly.

Whilst I feel assured from personal experience, and the testimony of professional friends, on whose judgment and candour I can implicitly rely, that in this we have acquired an important curative agency for *a certain class* of diseases, I desire it to be distinctly understood, as already stated, that I by no means wish

between the numeration of the pulse by others and myself, that I had counted it *by the carotid artery*, and considered it impossible for any one to reckon it correctly by the radial artery in such a case. The injected state of the conjunctival membrane of the eye, and the whole capillary system in the neck, head, and face, was so apparent, as Dr Radford very correctly stated, that no one near the patient could fail to observe it: this, together with the cold hands and contracted pulse at the wrist, led me to infer, that the rigid state of the cataleptiform muscles, opposed the free transmission of the blood through the extremities, and would thus cause increased action in the heart and determination to the brain and spinal cord, as resulted from the ingenious experiments of my late friend Dr Kellie, for speedily terminating the cold stage of ague, by putting a tourniquet round one of the extremities.

to hold it up as a universal remedy. I believe it is capable of doing great good, if judiciously applied. Diseases evince totally different pathological conditions, and the treatment ought to be varied accordingly. We have, therefore, no right to expect to find a universal remedy either in *this*, or *any other*, method of treatment.

CHAPTER V.

Reasons for delivering Public Lectures on Hypnotism — Mode of procuring refreshing sleep, with low pulse and general flaccidity of muscle — Efficacy of this plan.

When I had ascertained that Hypnotism was important as a curative power, and that the prejudices existing against it in the public mind, as to its having an immoral tendency, were erroneous; and the idea, that it was calculated to sap the foundation of the Christian creed, by suggesting that the Gospel miracles might have been wrought by this agency, was quite unfounded and absurd, I felt it to be a duty I owed to the cause of humanity, and my profession, to use my best endeavours to remove those fallacies, so that the profession generally might be at liberty to prosecute the inquiry, and apply it practically, without hazarding their personal and professional interest, by prosecuting it in opposition to popular prejudice. It appeared to me there was no mode so likely to insure this happy consummation as delivering lectures on the subject to mixed audiences. The public could thus have demonstrative proof of its practical utility; and, when it was proved to proceed from a law of the animal economy, and that the

patient could only be affected *in accordance with his own free will and consent*, and not, as the animal magnetizers contend, through the irresistible power of volitions and passes of the mesmerizers, which might be done in secret and at a distance, the ground of charge as to my agency having an immoral tendency, must at once fall to the ground. I have reason to believe my labours have not been altogether unsuccessful, in removing the popular prejudices; and I hope that the more liberal of my professional brethren, now that they know my true motives of action, in giving lectures to mixed audiences, instead of confining them to the profession only, and *especially as I made no secret of my modes of operating*, will be inclined to approve rather than blame me, for the course I have taken in this respect.

From some peculiar views, I was led to make experiments, by which I hoped to obtain natural or refreshing sleep, and the results were quite satisfactory. I have thus succeeded in making a patient, who, *when operated upon in the usual way*, was highly susceptible, and disposed to become strongly cataleptic, with rapid pulse and oppressed breathing, remain in a sound sleep for upwards of three hours, with all the muscles flaccid, and the pulse and respiration slower than natural, when operated on in this manner. All this difference arises from the simple circumstance of the *position in which the eyes are placed during the operation*, namely, closing the eyelids, and bringing the eyes loosely upwards, as if looking at an object at a great distance, the eye-balls being turned up only *gently*, so as to cause *dilatation* of the *pupil*, as already explained; and the limbs placed so as to relax the

muscles as much as possible, and thus prevent acceleration of the pulse.

I was led to the adoption of this method from the following train of reasoning. If, as I inferred was the case, the spasmodic tendency was reflected to the muscular system generally, from the semiparalyzed state of the branches of the third pair of nerves (which supply the levatores palpebrarum and irides,) during the continued fixed stare and straining of the eyes, I thought, were I to insure all the *other* concomitant requirements for procuring hypnotism, *minus* the *strain on the levators and irides*, I ought to procure refreshing sleep, without rigidity of muscle or quickened circulation. By closing the eyelids, the first could be obtained, and by turning the eyes up loosely, which dilates the pupils, the other would also be attained ; I therefore tried the experiment, which, as already noted, proved most successful.

I think the plan I have just pointed out is quite as simple, and I feel assured it will prove as efficacious in procuring "sleep at will" as that of Gardener, lately published by Dr Binns. I may add, that I publicly stated my plan at my lectures in London, on the 1st and 2d March, 1842, which was at least five or six months prior to the publication of Dr Binns's work. I had also done the same at my lectures in Liverpool, about six weeks before that last period.

Mr Barrallier, an intelligent surgeon, of Milford, who investigated the subject of Hypnotism with much zeal and success, and published some interesting experiments on the subject in the Medical Times, also referred to the case of a gentleman in that town, whom he had heard of as having been in the habit of pro-

curing sleep immediately by keeping his eyes fixed for a few minutes in one direction. Until he adopted this method he scarcely slept at all. For various modes of procuring sleep see pages 58-60 of this treatise.

In reference to my original theory, Dr Binns, at page 372, calls in question the justice of my allegation, that during Hypnotism, natural or artificial, there should be any imperfect arterialization of the blood, notwithstanding the suppressed or modified respiration and circulation. He has adduced no arguments, however, to convince me to the contrary; and I again repeat my conviction, that such condition of the blood *does* exist, and is a cause of ordinary sleep; and that the still more intense state of torpor, in a certain state of Neuro-Hypnotism, results from a still less perfectly purified blood; and, on the other hand, that the dreamy and exalted states arise from different degrees of stimulating properties of the blood, from being more highly arterialized at various stages, together with the velocity of circulation, and pressure or tension on the brain during the cataleptiform state.

CHAPTER VI.

Introductory remarks — Relation between mind and matter illustrated to disprove materialism — Armstrong, Colton, Browu, Abercromby, Stewart, Plato — General conclusion, that mind or life is the cause of organism — Power of conscience — The passions, how excited — Dr Elliotson's opinion as to the efficacy or non-efficacy of volition and sympathy with operator's brain — Modes of dividing the brain — Causes of Phrenology being imperfect — Objections to Phreno-Hypnotism — Mode of connection between the brain and body — First attempts at Phrenologizing during Hypnotism were failures — Succeeded by operating differently — Cases illustrative — A child operates successfully — Details of the case — Other successful cases — Proper time for operating — Case of an officer in 1758 — Inferences as to its curative powers — Opinions of Le Roy Sunderland, and Mr Hall — Presumed cause of phenomena called Cross Magnetism — Return stolen property to proper owners and proper place by smell and touch — Power of hearing *faint sounds* — Additional cases — Opposite faculties can be excited at same time by acting on the opposite hemispheres — Mode of operating — Concluding remarks on the value of testimony.

I HAVE no doubt that some of the views already advanced, and the facts on which they are grounded, have appeared startling to many of my readers, and I feel assured the subject to be discussed in the following chapter must be still more so; namely, that during hypnotism, we acquire the power, through the nerves of common sensation, of rousing any sentiment, feeling, passion, or emotion, and any mental

manifestation, according to our mode of manipulating the patient. This is what has been designated phreno-magnetism by the discoverers of these curious phenomena, but which, in accordance with my nomenclature, I shall designate phreno-hypnotism. It appears with this, as with many other discoveries, that similar investigations were going forward at the same time in England and America, while the discoverers were without the knowledge of each other's views or proceedings, and that the results of their experiments led all parties to form analogous conclusions.

It must be evident to every one who reflects deeply and dispassionately on the subject, that if we really can thus acquire such power as to rouse into great activity any faculty or propensity, whilst we diminish the activity of antagonist faculties, we must thereby acquire an important power for meliorating the moral, intellectual, and physical condition of man. I shall have no difficulty in adducing sufficient proof, that the human mind *can* be so developed and acted on through the bodily organs; but, before entering into a detail of the modes of doing so, I shall endeavour to remove a prejudice against the discussion of this subject, which has arisen from the unhappy circumstance that some of those who promulgated this doctrine have professed a belief in materialism. Such an avowal was indeed calculated to excite, not the prejudices, but the sound principles, of Christian society in general against the reception or dispassionate consideration of the facts on which it rested. For my own part, I can see nothing in the subject to warrant such conclusions as the materialists have avowed; and

truth is not to be rejected, because misguided men attempt to build upon it a hollow and unseemly superstructure.

The following are my views of the relation which subsists betwixt mind and matter:—I look upon the brain simply as the *organ* of the mind, and the bodily organs as the instruments for upholding the integrity of the bodily frame, and for acquiring and extending its communion with external nature in our present state of existence. That the mind acts *on* matter, and is acted on *by* matter, according to the quality and quantity, and relative disposition of cerebral development. This, however, does not imply, that mind is *a mere attribute of matter.** My thinking,

* "A few sounds acting on the tympanum of the ear, or a few black and small figures scribbled on a piece of white paper (see Mr Rennell's pamphlet) have been known to knock a man down as effectually as a sledge hammer, and to deprive him not only of vision, but even of life. Here, then, we have instances of mind acting upon matter, and I by no means affirm that matter does not also act upon mind; for to those who advocate the intimate connection between body and mind, these reciprocities of action are easily reconcileable; but this will be an insuperable difficulty to those who affirm the identity of mind and body." Again, "This intimate union between body and mind is, in fact, analogous to all that we see, and feel, and comprehend. Thus, we observe that the material stimuli of alcohol, or of opium, act upon the mind through the body, and that the moral stimuli of love, or of anger, act upon the body through the mind: these are reciprocities of action that establish the principle of connection between the two, but are fatal to that of an identity."—"Does not every passion of the mind act directly,

and willing, and acting, so as to influence the mental and bodily condition of another, surely does not destroy our separate individuality? As well might we say, that the refined compositions of a Mozart or Beethoven, which were conveyed to the ears of their delighted auditors through different instruments, were created by the thought and will of the instruments.

It appears to me quite clear, that the musician might conceive, and compose, and record every idea, whilst others could have no conception of their nature or merits, unless communicated *through an appropriate instrument or instruments.* The musician and instrument, therefore, are distinct in their nature, as the soul and the bodily organs are essentially distinct from each other.

I shall endeavour to illustrate my views by the

primarily, and, as it were, *per se* upon the body, with greater or with lesser influence in proportion to their force? Does not the activity belong on this occasion to the mind, and the mere passiveness to the body? Does not the quickened circulation *follow* the anger, the start the surprise, and the swoon the sorrow? Do not these instances, and a thousand others, clearly convince us that priority of action *here* belongs to the mind, and not to the body? and those who deny this, are reduced to the ridiculous absurdity of attempting to prove that a man is frightened because he runs away, not that he runs away because he is frightened, and that the motion produces the terror, not the terror the motion."—Colton's *Lacon.* The same author also urges the argument effectively by an appeal to the fact of mania being so frequently produced by *moral* causes, and the success which has attended the treatment of the insane by strict attention to *moral* management.

following simile. Suppose the instrument is good, and well fitted for expressing musical composition, it is evident, that it will better convey the beauties of the composition, than if represented by a *bad* or *indifferent instrument;* and will also afford more delight, and satisfaction, and encouragement to the farther exertions of the composer, than if performed on a bad instrument. Just so the mind furnished with a well developed brain. Supposing the musical instrument is very perfect in *some* parts, but very *im*perfect in others, it is evident, that the musician can afford more pleasure to others, as well as more satisfaction to himself, by playing on the more perfect parts. Then, supposing the parts played on capable of becoming improved, *by being so exercised,* (which is the case with several instruments, as the violin,) it is clear, that there will be greater and greater inducement for the musician to confine himself to the better parts of the instrument, and thus, by concentrating his whole energies to these points, he will more and more enamour himself, as well as his auditors, by the perfection of his performances.

This is exactly what I conceive takes place in reference to the brain, supposing different parts to be appropriated as the instruments for the manifestation of different mental functions. Every part of the human frame is continually undergoing the process of waste and repair — that is to say, the molecular particles of the various organs are continually changing, and *moderate* exercise tends to *increased development and power,* whilst *inaction* has the opposite tendency. This no one will deny. The analogy, therefore, is complete. The soul or mind, by being

exercised judiciously in a particular direction, strengthens some peculiar organ, and acquires precision from habit, which gives a tendency to perseverance in the same course of action; and, by refraining from certain practices, the corresponding organs become feeble, and thus exercise a less powerful influence on the mind. Thus we can account for the power of habit, both physical and mental, each tending to strengthen the other by correct training; and it is on this principle that we can hope to meliorate the condition of the vicious members of society, by separating them from bad companions and practices, and encouraging them in the exercise of virtuous habits.

Moreover, the mind of the musician may conceive and excite into activity the corresponding organs of the brain; these may react on his corporeal organs, and excite into activity the silent lyre; all these links of intercommunication may be perfected, without conveying any corresponding feeling or emotion to the minds of others, unless they are provided with appropriate recipient organs (musical ears) for conveying to their brains certain vibrations, and thus inducing in corresponding parts of their brains such a condition as may awaken in their minds certain associations of ideas, and manifest the peculiar emotions which arise from them. It is not enough that we have *part* of this concatenation complete; the whole must be complete, or the results cannot be perfect.*

* Some time after I had written the above, I had the satisfaction to meet with a somewhat analogous illustration from the pen of the late celebrated Dr John Armstrong, which I now quote from his work on *Fever*, p. 478 :—

The same arguments might be enforced in respect to the painter, and sculptor, and orator, but it appears

" It will have been perceived, that I consider insanity as the effect of some disorder in the circulation, whether produced by agencies of a corporeal or mental nature. It might be shewn by familiar facts, that the brain is the principal organ through which the operations of the mind are performed ; and it does not, as many have supposed, necessarily involve the doctrine of materialism to affirm, that certain disorders of that organ are capable of disturbing those operations. If the most skilful musician in the world were placed before an unstrung or broken instrument, he could not produce the harmony which he was accustomed to do when that instrument was perfect, nay, on the contrary, the sounds would be discordant ; and yet it would be manifestly most illogical to conclude, from such an effect, that the powers of the musician were impaired, since they merely appeared to be so from the imperfection of the instrument. Now, what the instrument is to the musician, the brain may be to the mind, for ought we know to the contrary ; and to pursue the figure, as the musician has an existence distinct from that of the instrument, so the mind may have an existence distinct from that of the brain ; for in truth we have no proof whatever of mind being a property dependent upon any arrangement of matter. We perceive, indeed, the properties of matter wonderfully modified in the various things of the universe, which strike our senses with the force of their sublimity or beauty ; but in all these we recognize certain radical and common properties, that bear no conceivable relation to those mysterious capacities of thought and of feeling, referable to that something which, to designate and distinguish from matter, we term mind. In this way, I conceive, the common sense of mankind has made the distinction which every where obtains between mind and matter, for it is natural to conclude, that the essence of mind may be dis-

to my mind so evident by what has already been advanced, that I forbear extending my illustrations,

tinct from the essence of matter, as the operations of the one are so distinct from the properties of the other. But when we say that mind is immaterial, we only mean, that it has not the properties of matter; for the consciousness which informs us of the operations, does not reveal the abstract nature of mind, neither do the properties reveal the essence of matter. When any one, therefore, asserts the materiality of mind, he presupposes, that the phenomena of matter clearly shew the real cause of mind, which, as they do not, he unphilosophically places his argument on an assumption. And his ground of reasoning is equally gratuitous, when he contends that mind is an attribute of matter, because it is never known to operate but in conjunction with matter, for though this connection is continually displayed, yet we have no direct proof of its being necessary."

In like manner, Mr Herbert Mayo, in the introduction to his late work on the Nervous System and its Functions, writes thus:—"Life is a force so contrived and used, as to qualify the materials of the inert world for a temporary union with consciousness,—a means how mind may enter into such relations with matter, that it may have its being and part in physical nature, and its faculties developed, and its capabilities and tendencies drawn out and proved (for whatever ulterior purpose) in subjection to, and in harmony with, her laws.

"As we imagine the Supreme Mind to be ubiquitous, infinite, controlling, but uncontrolled by matter, so in contrast with these attributes we conceive the finite mind to be bound down to place, and to be dependent on a certain arrangement of matter for its manifestation, each power displayed as the property of a tissue, each agency as the function of an organ.

"These views do not lead to materialism. For one cannot

conceiving them to be unnecessary. I therefore conclude that the soul and the brain are essentially quite distinct, and stand much in the same relation to each other as the musician and musical instrument.

Another powerful argument of the mind being an independent essence, is the fact, that amidst the continued changes which we know are going on in the physical frame, we still recognize personal identity; and the remembrance of occurrences, even of early life, after every particle of the body has been changed several times, is reconcileable with the idea of the original mind merely having exchanged and renovated the substance of its dwelling-place; but how can we suppose that each particle had, in retiring, transferred its quantum of knowledge to the particle of matter which was to supply its place?

Colton's remark seems very just when he says, — "Many causes are now conspiring to increase the trunk of infidelity, but materialism is the main root of them all." I have therefore endeavoured, and I hope, by what has already been said, with some success, to prove, that the belief in the brain being the organ of the mind, leads only to the admission of the

disjoin the physiology of the nervous system from mental philosophy, nor investigate the play of its organs without attending to the mind itself. And if equal consideration is given to the two classes of phenomena, it is impossible (so at least it appears to myself) to avoid the conviction, that they are essentially independent the one of the other, and belong to distinct essences; and that ipseity, the consciousness of personal being, is not a mode of material existence, nor physical impenetrability an attribute of that which feels and thinks."

necessity of certain conditions of matter, in order to make the varied conditions of mind manifest to ourselves and other beings with which we are surrounded during the present state of our existence. The charge against the doctrine of phrenology, therefore, as leading to a belief in materialism, is altogether unfounded; for phrenology merely professes to appropriate to *separate portions* of the brain the *execution of special functions* or *manifestations*, which are generally admitted, without hesitation, to result from its functions as a single organ. I might therefore at once dismiss the subject, leaving the doctrines of the existence of a God, and the immortality of the soul, to the defence of many able writers on that department of mental philosophy. However, as it appears to me that an argument of considerable strength, in support of both these doctrines, may be drawn from the doctrines of phrenology, or the allocation of special functions to particular portions of the brain, I think it may not be out of place for me very briefly to advert to these topics.

The concurrent notions and practices of all nations, savage as well as civilized, clearly indicate their inward belief in a superintendent power who rules the destinies of man and of nations, as verified by their varied forms of worship. Phrenology, as illustrated by Hypnotism, does more — it proves that there is a particular portion of the brain which the mind may use as an organ destined for the especial purpose of adoration; and, as nothing has been made in vain, or without a final cause, we may safely infer that such an organ would never have been made had it not been intended to be exercised; and how could it have been

exercised worthily had there been no suitable object of adoration? The very fact, therefore, of the existence of such a special organ having been ascertained, stamps the folly of the Atheist; and, as we have proved that mind is not necessarily a mere attribute of organized matter, but a distinct essence, we cannot suppose it to be more perishable than matter; and as it is an acknowledged fact, that matter, so far as we can apprehend, is essentially indestructible, analogy would lead us to infer, that the mind, the more important part of man, will not be less imperishable; and, consequently, the most rational conclusion to which we can arrive is, that the soul is immortal.

"There is mind, then, as well as matter, or rather, if there be a difference of the degrees of evidence, there is mind, more surely than there is matter; and if at death not a single atom of the body perishes, but that which we term dissolution, decay, putrefaction, is only a change of the relative positions of those atoms, which in themselves continue to exist with all the qualities which they before possessed, there is surely no reason, from this mere change of place of the atoms that formed the body, to infer, with respect to the independent mind, any other change than that of its mere relation to those separate atoms. The continued subsistence of every thing corporeal cannot, at least, be regarded as indicative of the annihilation of the other substance, but must, on the contrary, as far as the mere analogy of the body is of any weight, be regarded as a presumption in favour of the continued subsistence of the mind, when there is nothing around it which has perished, and nothing even which has perished, in the whole material universe,

since the universe itself was called into being." Dr Thomas Brown.

"The mind remembers, conceives, combines, and reasons; it loves, it fears, and hopes in the total absence of any impression from without, that can influence, in the smallest degree, these emotions; and we have the fullest conviction that it would continue to exercise the same functions in undiminished activity, though all material things were at once annihilated."—Abercrombie.

Mr Stewart also says, "Of all the truths we know, the existence of mind is the most certain. Even the system of Berkeley concerning the non-existence of matter, is far more conceivable, than that nothing but matter exists in the universe."

Plato also wrote thus:—"The body being compounded, is dissolved by death; the soul, being simple, passeth into another life, incapable of corruption."

That accomplished physician and metaphysician, Dr Abercrombie, after relating the effects on memory of diseases and disorders of the brain, with, in many instances, serious organic lesion, concludes thus: "One thing, however, is certain, that they give no countenance to the doctrine of materialism, which some have presumptuously deduced from a very partial view of the influence of cerebral disease upon the manifestations of mind. They shew us, indeed, in a very striking manner, the mind holding intercourse with the external world through the medium of the brain and nervous system; and, by certain diseases of these organs, they shew this intercourse impaired or suspended; but they shew nothing more. In particular, they warrant nothing in any degree analogous to those

partial deductions which form the basis of materialism. On the contrary, they shew us the brain injured and diseased to an extraordinary extent, without the mental functions being affected in any sensible degree." (This power no doubt arises from each hemisphere having corresponding organs, and consequently when only *one* is diseased, the other may be adequate to the manifestation of the mental phenomena.) "They shew us farther, the manifestations of mind obscured for a time, and yet reviving in all their original vigour almost in the very moment of dissolution. Finally, they exhibit to us the mind, cut off from all intercourse with the external world, recalling its old impressions, even of things long forgotten, and exercising its powers on those which had long ceased to exist, in a manner totally irreconcilable with any idea we can form of a material function." *On the Intellectual Powers*, pp. 154, 155.

In addition to what I have already advanced in refutation of the doctrine of materialism, I beg to submit what appears to me much more probable than that mental manifestations are the result of mere organism, — namely, that organism is the result of mind, or the principle of life influencing or directing organism in accordance with what may be its especial wants and desires. We know that every seed of a plant has a principle of life imparted to it by the great first cause of all, by which, when sown in congenial soil, it will exert its powers, and appropriate to itself materials from the soil, to form an organism in accordance with its peculiar wants and nature; and that, having passed through certain conditions, and formed other kindred seed or germs to propagate its kind

under a return of favouring circumstances, the plant dies, and is resolved into its original elements. Man and animals also possess similar faculties for propagating and multiplying their species; and to me it appears far more probable, that the peculiar organism of each variety results from the vivifying or intelligent principle we call life or mind (and no one denies the existence of the former, although we know nothing of its essence or mode of operation,) directing and determining appropriate formation, than that the mere accidental union of particles of matter, in definite quantity and form, should be the *cause* of mental phenomena.* It is true we can here only speak of analogies, but the analogy in favour of this proposition seems far more natural and probable than the other. Is it not, for example, *à priori*, as probable, on viewing a well planned factory, fitted up with what is called self-acting machinery, for us to suppose that the whole should have been planned, and the machinery constructed, in accordance with the intelligent designs of a skilful artist, as that the brute matter, of which the whole is constructed, came into its particular forms and arrangements of *its own accord, or by accident*, and thus produced the intelligence of the superintending possessor? The higher and more perfect the original force, or life,

* The original identity of structure of the germ of the most various organic beings, constituted, as it always is, of a cell, with a nucleus, seems to prove, that the cause of the variety of classes, families, genera, and species of animals and plants developed from the germ, resides not in the structure or chemical property of the germ, but in the idea or spirit implanted in it at its creation." (*Müller*, p. 1339.)

or spirit, originally imparted into each species, the more complex and extensive should we expect to find the corresponding organism, to adapt it for the suitable performance of its more varied functions ; and it therefore was necessary for man to have that superiority, even in the form and functions of his hands, in which he so much surpasses that of all other animals, to fit him for the execution of the more extended range of operations, which his superior endowments and cerebral organism fitted him to devise.

In this view of the subject, (and it appears to me, after consulting the various opinions of our ablest authorities on life and organization, to be the most satisfactory conclusion I could arrive at,) every plant or animal, however minute, may have a particular vital or directing principle originally imparted to it, and still sustained in its power by the great Creator, without the necessity of according to each an immortal existence and responsibility. Nor is there any thing irreconcilable in the supposition that man, with higher original powers, and more perfect organism, fitting him to use these appropriately, and who is the highest link in the chain, in this world, between inorganic matter and the Supreme Being, should be constituted a responsible agent, and exist hereafter, whilst those creatures with less expansive faculties, both of life and organization, may be exempted from such ultimate responsibility, and may *not* be immortal.

This is only analogous to what we see in respect to a commanding officer and his men, the *former only* being responsible for imprudent enterprises, the latter being considered merely as instruments in his hands.

I shall close these remarks on the immortality of the soul by a quotation from that excellent work, "Abercrombie on the Intellectual Powers." "This momentous truth rests on a species of evidence altogether different, which addresses itself to the moral constitution of man. It is found in those principles of his nature by which he feels upon his spirit the awe of a God, and looks forward to the future with anxiety or with hope, — by which he knows to distinguish truth from falsehood, and evil from good, and has forced upon him the conviction that he is a moral and responsible being. This is the power of conscience, that monitor within, which raises its voice in the breast of every man, a witness for his Creator. He who resigns himself to its guidance, and he who repels its warnings, are both compelled to acknowledge its power; and whether the good man rejoices in the prospect of immortality, or the victim of remorse withers beneath an influence unseen by human eye, and shrinks from the anticipation of a reckoning to come, each has forced upon him a conviction, such as argument never gave, that the being which is essentially himself is distinct from any function of the body, and will survive in undiminished vigour when the body shall have fallen into decay.

"There is thus, in the consciousness of every man, a deep impression of continued existence. The casuist may reason against it till he bewilder himself in his own sophistries; but a voice within gives the lie to his vain speculations, and pleads with authority for a life which is to come. The sincere and humble inquirer cherishes the impression, while he seeks for farther light on a subject so momentous, and he

thus receives, with absolute conviction, the truth which beams upon him from the revelation of God, that the mysterious part of his being, which thinks, and wills, and reasons, shall indeed survive the wreck of its mortal tenement, and is destined for immortality."*

It must be obvious to all, that every variety of passion and emotion can be excited in the mind by music; but how does this arise? Simply by the different effects produced by the varied degrees of velocity, force, quality, and combinations of the oscillations of the air acting on the auditory nerves, these again communicated to the brain, and this acting on the mind and body, creating corresponding mental and bodily manifestations. Every one must have observed the remarkable effects evinced by these means on the physiognomy, and the more critically observant must have noticed, that in susceptible individuals there is also a very marked change in the state of the respiration and general posture of the body. They must also have experienced, in themselves and others, how prone we are to assume a

* To those who wish to pursue the subject farther, I beg to refer to Dr Samuel Clarke on the Being and Attributes of God, pp. 70—75; Jackson on Matter and Mind, pp. 41—47, 51; Warburton's Divine Legation, vol. I. book 3d; Drew's Essay on the Immortality of the Soul; and Ramsay's Principles, pp. 233—5; also Brougham and Bakewell, where they will find it ably argued as far as Natural Theology can avail; but the sacred volume contains a lucidity and sanction beyond all we can adduce from mere human ingenuity, and I therefore conclude by referring to it, as "life and immortality are clearly brought to light through the Gospel."

sympathetic condition, both of mind and body, from those with whom we associate, or during a temporary interview. These physical changes seem to result from a mental influence imparted through the eyes and ears, and then reflected from within, through the respiratory, facial, and spinal nerves, on the external form and features. Now, such being the case, is there any great improbability, that by calling the muscles of expression into action during the hypnotic state, by titillating certain nerves, that the impression of the feeling with which such external manifestation is generally associated should be reflected on the brain, and excite in the mind the particular passion or emotion? I think it is highly probable this is the true cause of the phrenological manifestations during the hypnotic condition; and as it is the peculiar feature of this condition, that the whole energies of the soul should be concentrated on the emotion excited, the manifestation, of course, becomes very decided. I presume the different points pressed on, through the stimulus given to various fascieuli of nerves, call into action certain combinations of muscles of expression in the face and general frame, and also influence the organs of respiration, and thus the mind is influenced, *indirectly*, through the organs of common sensation and the sympathetic, as sneezing is excited in some by too strong a light irritating the optic nerves. Two patients who are highly intelligent, and remain partially conscious, and who acknowledge they did all in their power to resist the influence excited by manipulating the head, state, that the first feeling was a drawing of the muscles of the face, and affection of the breathing, which was fol-

lowed by an irresistible impulse to act as they did, but why they could not tell.

In this view of the subject it would resolve itself into the laws of sympathy, and the question then is, where are the external or superficial points of the sympathies located? Experience must decide this, and in the peculiar condition induced by hypnotism, according to my own experience, this can be more readily and certainly determined than in the normal state. These points having been ascertained, we can then determine how and where to act according to our particular object; and it can be of no real importance where the cerebral points or special organs may be posited.

As to the real locations of the sympathetic points, by stimulating which we produce peculiar manifestations, they appear to me not to be quite accurately the same in all heads, but, on the whole, pretty near the centres of the organs as mapped out on heads generally approved by phrenologists, and I have had decided proof that there is some relation subsists betwixt the size and function, as in general there is more energy displayed when there is large development, and the negative when it is defective. Thus, a patient with large combativeness or destructiveness, when excited during hypnotism, will display great violence and disposition to attack others, whereas, where they are defective, they will shrink and express a fear that some one is quarrelling, or angry with them.

If the solution of the cause of these remarkable phenomena now given should not be deemed correct, the only other which occurs to my mind as at all

satisfactory, is this, that the different fasciculi of sentient nerves excite *directly* the *corresponding points* of the brain, and these again the physical manifestations. We know by what musical combinations and movements we can excite the different passions; we know also that this arises from some peculiar impression communicated to the brain through the portio mollis of the seventh pair of nerves; and whether this is conveyed to it as a single organ only, or as a combination of organs, it is clear that, as the origin of the *seventh* is *more remote* from the brain than the origin of the *fifth*, there must, consequently, be at least as great difficulty in accounting for such results being excited through the different branches of the *seventh* as through those of the *fifth* pair.

The animal magnetizers do not now contend for *their volitions* being necessary. Dr Elliotson distinctly states, in a published letter, dated 11th September, 1842, that he had "never produced any effect by mere willing;" and adds, "I have never seen reason to believe, (and I have made innumerable comparative experiments upon the point,) that I have heightened the effect of my processes by exerting the strongest will, or lessened them by thinking intentionally of other things, and endeavouring to bestow no more attention upon what I was about than was just necessary to carry on the process. So far from willing, I have at first had no idea of what would be the effect of my processes; in exciting the *cerebral organs*, the effect ensues as well in my female patient though the manipulator be a sceptic, and may therefore be presumed not to wish the proper result to ensue, and though I stand aside, and do not know

what organ he has in view. I have never excited them by the mere will ; I have excited them with my fingers just as well when thinking of other matters with my friends, and momentarily forgetting what I was about," &c. The Doctor also denies his belief in the phrenological results arising from *sympathy with the state of the operator's brain*. I feel convinced that he is right in these sentiments, and believe that the same degree of mechanical pressure or stimulus to the integuments of the cranium, from an inanimate substance, when the patient is in the proper stage of the mesmeric condition, will produce the same manifestation as the personal touch of either sceptic or believer in animal magnetism. Thus, touching them with a knobbed glass rod, three feet long, has produced the phenomena with my patients as certainly as personal contact, so that if there is any thing of *vital* magnetism in it, it is subject to different laws from that of *ordinary* magnetism or electricity.

Mere pointing I have myself found sufficient to excite the manifestations in several patients, after previous excitement of the organs, but this arises from feeling, as I know the sensibility of the skin in those cases enables them to feel *without actual contact*.

The following experiment seems to me to prove clearly that the manifestations were entirely attributable to the mechanical pressure operating on an excited state of the nervous system. I placed a cork endways over the organ of veneration, and bound it in that position by a bandage passing under the chin. I now hypnotized the patient, and observed the effect, which was precisely the same, for some time,

as when no such appliance was used; after a minute and a half had elapsed, an altered expression of countenance took place, and a movement of the arms and hands, which latter became clasped as in adoration, and the patient now arose from the seat and knelt down as if engaged in prayer. On moving the cork forwards, active benevolence was manifested, and on being pushed back, veneration again manifested itself. I have repeatedly tried similar experiments with this, and other patients, with the liko results, including other organs. It is clear there was no mechanical pressure to direct the movement *downwards*, because there was pressure *upwards also;* and had there been any preconceived notion in the patient's mind, to excite to such action, it ought to have been manifested *immediately* on *passing into the sleep.* None of the patients had the slightest notion of what was my object in making such experiments, and none of them saw the others operated on. At page 141, it will be observed, pressure by their own fingers produced similar manifestations, even whilst their minds were expecting some other results.

Whilst it is generally agreed that the brain admits of being divided into regions for the animal propensities, moral sentiments, and intellectual faculties, it has not been at all possible to prove satisfactorily the exact position and size of each organ, as noted by the phrenologists. Granting that there is a distinct organ or point in the brain for each faculty, which I think is highly probable, still there must ever be insuperable difficulty in thus accurately determining character, even supposing we knew the exact position and size of each organ, because much must

depend upon the state of perfection of structure, and activity of the point or organ, as well as its absolute size. Thus, a person with a large eye may have defective sight, whilst a person with a small eye may see clearly and distinctly, the greater perfection of structure, and activity of the optic nerves, more than compensating for mere deficiency of size. So it is with the brain, a part may be abnormally large, and the faculty dull, from want of power or activity, or perfection of organic structure ; and the reverse may obtain, a small development, with high activity, may render its function predominant. It is from a want of such knowledge as this that phrenology must ever prove imperfect, even granting the localities to be correctly ascertained and established. However, when we have ascertained the points where, by acting in any peculiar manner, we can excite into activity particular sympathetic *physical and mental* associations, whilst the other faculties are put into a state of quiescence, it appears to me to be a matter of far greater importance, and a subject still more curious, than any thing ever brought forward by phrenologists. It is far more available for practical purposes too. Phrenologists could at best only pretend to tell the *natural tendencies* of an individual, and direct that he should be educated in accordance with a specific plan, as has hitherto been done independently of phrenology, from watching the natural dispositions and habits of different individuals, by encouraging and directing their studies in such and such a direction ; but here, *in addition* to this, we have the power of giving a decided impulse in any particular direction. It ought not to be overlooked, that this does not deprive us of

any of our *former* available modes of instruction in science and morality, but it promises to prove a powerful auxiliary for expediting and ensuring the success of those means. It therefore follows, that it becomes the duty of every well-wisher to his species to investigate this matter, and determine how far it is *generally* applicable. It is still more the duty of the medical faculty to do so, because, should farther experience determine this question in the affirmative, it is reasonable to expect it may be turned to the best account in the cure of disease, by applying our remedies *locally*, to the cutaneous points which have been ascertained to be the centres of the morbid concatenation. Thus, leeching and sedatives, &c. might be applied to such points when there was excitement of the corresponding functions, and *vice versa*, with the reasonable hope of success; and if this method cannot be effective, we can be pretty certain of success through hypnotism, by exciting the morbidly low faculty where there is depression, and the antagonist organ where there has been excitement. In this manner I have no doubt but hypnotism may prove of incalculable advantage in the treatment of many cases of insanity, and nervous affections tending to induce that disease.

I am quite aware some will be ready to start an objection to my views, by stating that the scalp, where many or most of these demonstrations have been manifested, is not highly sensitive, that it is not extensively supplied with sensient nerves, and that they all arise from the fifth pair, and do not pass directly through the skull to the subjacent points of the brain. This, however, does not prove that the

terminal branches may not ultimately have a special influence on such points, notwithstanding their circuitous course to arrive there. I beg to remind such individuals that we are by no means sufficiently acquainted with the laws and distribution of the nervous system, to be able to prescribe rules as to *how* it *ought* and *must* act. Who does not know, that until the discoveries of our illustrious countryman, Sir Charles Bell, the same nerve was considered to give both sense and motion? And when he propounded that the true cause of its double functions was because of its having *double* roots, was not this announcement scouted for some time, and then, when proved to be true, were not attempts made to rob Sir Charles Bell of the honour of the discovery?

There seems to be great reason to conclude that the distribution of the nerves of the scalp will ultimately be found far more intricate and beautifully arranged than at present we have any conception of.

I shall now proceed to state my views as to the mode in which different parts of the brain are associated with different parts of the body. I have long quite agreed with those physiologists who consider that the *vis nervosa* is something circulated in tubes, that the primitive nerve-tubes do not anastomose, but only run parallel with others, remaining distinct and isolated throughout their course, and that consequently the "cerebral extremity of each fibre is connected with the peripheral extremity of a single nervous fibre only, and that this peripheral extremity is in relation with only one point of the brain or spinal cord: so that, corresponding to the many millions of primitive fibres which are given off to

peripheral parts of the body, there are the same number of peripheral points of the body represented in the brain. The sensation of a single point evidently depends on the impression being conveyed by means of a single fibre to a single point of the sensorium." (Müller.) It is from the same cause that we can regulate simple or associated movements of distinct members.

From all these considerations it appears quite reasonable to suppose, and analogy, as respects distinct organs being appropriated for other special functions, warrants the inference, that different parts of the brain may have special functions to perform, both as regards mind and matter; and that, when such points are excited into inordinate activity, the manifestations will become correspondently more conspicuous, and *vice versa*.

We know from experience that the various passions and emotions can be excited through the organ of hearing either by music or oratory, through the eyes by painting and sculpture, and likewise, though less extensively and efficiently, through common sensation, and there seems to me to be nothing, *à priori*, to militate against the probability, that this may be effected to a much greater extent than has yet been done, provided we can only discover the peculiar mode of exciting certain portions of the brain. If the views already advanced, that every point of the body supplied by primitive nervous fibres has a distinct corresponding point in the brain, it is clear, that by titillating each peripheral point, we shall excite its corresponding central point; and from what shall be found detailed in the experiments recorded, it appears

highly probable that the respective parts of the brain corresponding to *every* part of the body, may be excited into activity through certain sympathetic points in the integuments of the head and neck, and if so, we may also excite into activity the whole of those actions, mental and muscular, which are associated with each portion of the cerebrum. In this case Smellie's supposition would be completely realized in man. He expresses himself thus: — "I can conceive a superior being so thoroughly acquainted with the human frame, so perfectly skilled in the connection and mutual dependence which subsist between our intellect and our sensitive organs, as to be able, by titillating in various modes and directions, particular combinations of nerves, or particular branches of any single nerve, to excite in the mind what ideas he may think proper. I can likewise conceive the possibility of suggesting any particular idea, or species of ideas, by affecting the nerves in the same manner as these ideas affect them when excited by any other cause." This confident aspiration seems to be now in a great measure realized, by certain modes of manipulating patients during the hypnotic condition, of which I shall now adduce a few illustrations.

My first attempt to excite the phreno-hypnotic phenomena was in the month of April, 1842, in the lecture-room at Liverpool, but it did not succeed. I then tried the experiment repeatedly in private, putting the patients to sleep by contact as well as in my usual way, but still could not succeed. I was anxious to try it fairly, and therefore applied to Mr Brookes, through the kindness of Dr Birt Davies of Birmingham, for information as to the mode Mr

Brookes had practised so successfully, and which was most politely communicated to me by both these gentlemen. I tried this mode with several patients, both in my usual plan and that of the animal magnetisers, but was still unsuccessful. I now abandoned it as a hopeless task, presuming the cases which had proved successful with others must have been *lusus naturæ*, or that the operators had deceived themselves, the patients having been led to answer, and give the manifestations they did, from the nature of the leading questions proposed, and might afterwards remember what passed at previous operations, and answer accordingly; whilst, like natural somnambulists, they might not remember, when awake, what had passed during their sleep.

Last December I was induced to make another attempt, from reading a report of Mr Spencer T. Hall's two first lectures on the subject, at Sheffield: and it was remarkable, that the very first patient I tried in that way exhibited several of the manifestations. However, I was led to refer the result to a totally different cause from what he and the other animal magnetisers did. I concluded it arose from the different degrees of sensibility of different parts of the integuments, conveying correspondingly varied impressions when similarly impressed, and exciting different ideas in the mind, and thus calling up old associations; and that when similarly impressed the same ideas might again present themselves to the mind. I considered this far more probable than that the brain was affected by any transmission from the operator to the brain directly through the skull; and to prove this, tried the effect of pressure over parts which had *no*

cerebral substanee directly subjacent, and the results confirmed my expectations. Thus, pressure on the apex of the *mastoid process*, and the *ossa nasi*, and the *chin*, were as certainly followed by particular manifestations, as pressure on different parts of the cranium were followed by others. I also very soon ascertained that the same points of the cranium, when thus excited, did not excite the *same ideas or emotions* to the minds of *different* patients, which I considered ought to have been the case, according to the views of the stanch phrenologists. I have since discovered the cause of this, namely, *not having operated at* the *proper stage* of the hypnotic condition.

I shall now adduce a few examples. On one subject, after being in the hypnotic condition for a few minutes, by applying gentle pressnre over the *ossa nasi*, immoderate laughter was immediately excited, and ceased as abruptly on removing the contact. The abruptness of these transitions, especially from immoderate laughter to the extreme gravity and vacancy of expression peculiar to the hypnotic state, was quite ludicrous, and almost beyond belief. Supposing she were singing the most grave tune and solemn words, the moment the nose was touched in this manner, by any one, she was irresistibly thrown into this merry mood, but would join in the tune again with the utmost gravity the moment the contact ceased. Rubbing the same part, or pinching up the skin over it, seemed to produce no effect whatever. On applying pressure to this patient's chin there was an immediate catch in the breathing, with sighing and sobbing, which would subside on removing the point of contact. By touching both nose and chin at same time there was the

most ludicrous combination of laughing and crying, each struggling for the mastery, as we sometimes see in hysteric attacks. Both would cease immediately on removing the contact. Friction or pinching the skin on the chin had no effect of producing such phenomena. In short, no part of this patient which I tested seemed capable of being excited by friction or pinching the integuments, excepting around the orbits, which produced spectra, although less perfectly so than by simple pressure against the bone. This patient, being pressed over the phrenologists' organ of *time*, always expressed a desire "to write" — a letter — to her mother or her brother; over their organ of *tune*, "to sing;" between this and wit, "to be judicious;" the boundary between wit and causality, "to be clever;" causality, "to have knowledge;" in the centre of the forehead, to have "a certain perception of learning;" below this the phrenologists' eventuality, "to be skilful;" the points of the head occupied by veneration and benevolence were sometimes indicated by the desire "to be virtuous," or "to be honourable;" most frequently, when the point touched was over benevolence, the answer was, "to be honourable," and when over the other point, "to be virtuous," when both points were touched at same time, it was, "to be honourable and virtuous," and the same answer was always given when these points were touched *combined with No.* 1, *or amativeness.* When the latter was touched alone, the answer always was "to be commended;" when approximating the mastoid process, or over that process, a remarkable placidity, or expression of delight, came over the countenance, and the desire was for "complacency,"

which, when hypnotized, she defined, "to be civil," but when awake she seemed at a loss to know what the word meant. On touching "combativeness" the placidity of countenance was speedily exchanged for the opposite expression; but on pressure being made immediately above the ears, the most ferocious aspect of countenance was assumed, the breath being suppressed almost to suffocation, the face becoming flushed, with grinding of the teeth; and when the arms were not rigid, the most vigorous efforts at inflicting violence on all who were within her reach, as several gentlemen can attest to their personal knowledge and sorrow. On pressure being applied to the root of the nose, the idea of seeing different forms, and figures, and colours, seemed to be excited in the mind, more vividly when certain points were thus excited, but it could be excited by pressing the integuments against the *under*, as well as *upper* edge of the orbit, with this difference, that the objects seen, or rather spectra excited, were then generally of a painful and distressing character, whereas they were generally of a bright, and glowing, or cheerful description when excited by acting on the *upper* margin of the orbit. I should observe, that care was taken, in all these experiments, *not to press against the globe of the eye.* Thus far the phenomena were pretty uniform in this patient, the answers having been generally very much the same when impressed *exactly in the same way, on the same points, and under similar circumstances in all other respects.* Thus, the last day I had an opportunity of testing this patient, I went over the different points four times with scarcely the slightest variation in the answers, as can be testified by several

gentlemen who were present; and they were again repeated two or three times the same evening with like results. This patient was operated on the previous day in presence of several professional and scientific gentlemen, when several answers were given different. More than one being operating on that occasion, and the manner and degree of touching the parts being different, might be the cause of the varied results. I am satisfied this patient knew nothing of phrenology; and that she remembered nothing of what she said, or was done to her during these operations.

Case II. In this patient *friction* would *excite*, whilst *pressure* had *no effect* in calling forth manifestations. In this case, friction over the *ossa nasi* excited the desire for "something to smell," generally aromatic vinegar or Eau de Cologne; over the chin, for something to eat; over the tendon of the orbicularis, a slight tendency to laugh; close upon the root of the nose, friction excited spectra, and round the orbit, in like manner, the same or similar spectra, differing in form, and hue, and combination, according to the *degree* of *pressure* and *friction* applied; over the organ of tune, "to sing;" over the back part of the base of the head, expressed herself "very happy and comfortable;" over combativeness and destructiveness, a quarrelsome disposition, as manifested in word, look, and action. The other parts tried were less certain or decided in this patient.

Case III. In this patient, friction excited the desire "to waltz," when applied over the organ of tune, and the desire "to walk," when applied to the organ of wit, as mapped by the phrenologists, and in like

manner, " to sing," when veneration was the point affected. Spectra, also, when the integuments were rubbed against the margin of the orbits. Although not corresponding with the phrenological charts, nor with what occurred in the others, similar answers were given when the same points were similarly excited.

Case IV. When asked what she would like, when manipulated as the others referred to, always answered, " nothing at all," excepting over the most sensitive parts of the cranium, when her answer was, " leeches to my head."

Case V. Very much the same as the last.

I think the cases referred to support my position, that the different results arise from the circumstance of different parts of the integuments having different degrees of sensibility, and thus exciting different ideas in the mind when the same quality and intensity of stimulus is applied to each part in succession. There can be no doubt but the point under which the phrenologists have posited " combativeness and destructiveness," is the most highly sensitive of any part of the cranium, and is always accompanied with symptoms of the patients feeling pain, and, as a matter of course, they will offer resistance, and attempt to free themselves from the offending cause ; and so of the rest, according to their respective impressibilities.

After the above remarks had been written, and my work sent to press, I met with the following most interesting case : — I was informed that a child, five years and a half old, who had been present when I exhibited the experiments on No. I. the same even-

ing had proposed to operate on her nurse. The nurse had no objection to indulge the girl, never supposing any effect could take place. However, it appeared she speedily closed her eyes, when the child, imitating what she saw me do, placed a finger on her forehead, and asked what she would like, when the patient answered, "to dance;" on trying another point, the answer was, "to sing," and the two then had a song together, after which the juvenile experimenter roused the patient in the same manner she had seen me do.

The above circumstance being related to me the following day, I felt curious to ascertain whether there might not be some mistake, as there had been no third party present, and it depended entirely on the statement of the child, which induced me, when visiting the family the day after, to request permission to test the patient. This was readily granted; and, to my astonishment, she manifested the phenomena in a degree far beyond any case I had tried; indeed, she did so, with a degree of perfection which baffles description.

However frequently she was tried, the same expression of countenance, the same condition of the respiration, and similar postures of the body have been evinced, when the same points were pressed. Indeed, so highly susceptible was she, that, after a few trials, when I pointed a finger or glass rod over the part, without contact, similar manifestations resulted, only in a less rapid and more modified degree. I also found by trying No. II. *at an earlier stage*, that her susceptibility was almost equal to the present case. The following are a few of the more striking

manifestations: pressure on the chin was followed by movement of the jaws, lips, and tongue, with the desire to eat; on the lower part of the nose, "to smell;" insertion of tendon of the orbicularis, immoderate laughter, which, on being asked why she laughed, the answer indicated, it was from a sense of the ludicrous being excited; over time, "to dance;" tune, "to sing," with pressure on the eye at same time, she did sing part of a song; over the back of the head, No. I. she shuddered and retreated, under the impression that some one was about to take liberties with her, the same feeling of delicacy was also manifested *when any other part of the body was touched excepting the head and face;* over apex of mastoid process, the desire to shake hands and be friendly; the former, with No. 4, or adhesiveness, she would lean to, or clasp any one near her; combativeness, the reverse; destructiveness, (it is very small,) she was distressed from the notion that some one *was quarrelling with her;* philoprogenitiveness, she always said, "hark, the poor child is crying!" secretiveness and caution, she would tell nothing; benevolence, "*to travel;*" veneration, she knelt down in the most solemn manner and prayed; combined with hope an expression of ecstasy united with devotion; over the eyebrows, spectra of all forms and colours, gay and glowing, and when below the eye, the notion of the sea, a ship, and people about to be drowned; at a farther trial, other manifestations came out equally, or even more strikingly, according to the accuracy with which the corresponding points were touched. In particular, I must note what happened the first time I touched imitation, which was entirely accidental,

and whilst, besides a relation of my own, there was present a gentleman whose literary and scientific attainments, and philosophic turn of mind, as well as high standing in society, render him an ornament to our country. Besides imitating every thing done or said in English, she imitated correctly French, Italian, Spanish, German, Latin, and Greek; every word was spoken with the utmost precision, and has been done several times since before many professional and scientific gentlemen, and ladies, who can bear testimony to the extraordinary fidelity of pronunciation and emphasis. I need scarcely add, she could not do so when tested after being awakened. Many other patients I have since made do the same, one a girl of only twelve years of age.

On Mr Hall's arrival in Manchester, previous to his first lecture, I had the pleasure of seeing him at my house, when I exhibited my experiments on this and another patient, with which he seemed much gratified. I also afforded him an opportunity of seeing them again next day. After I had them in the hypnotic condition, I requested him to manipulate their heads, which he did more minutely than I had done, and consequently brought out additional manifestations. I was on the alert to all he did and said, for I was determined he should not have an opportunity of *prompting in any way*, and most assuredly, by exciting acquisitiveness, he very soon led the patient to steal a silver snuff-box from a gentleman present, and it was most striking the anxiety with which she returned it, on Mr Hall removing the point of contact to conscientiousness,—the movement of the arm was changed *instantly*, as if automatically.

I had never tried to excite either of these two points. The other manifestations, which I had previously seen developed, were precisely the same under his manipulations as my own. I made several attempts to excite the organ of benevolence, but without effect, until one day I accidentally placed my finger so low as I should have considered to be the middle of comparison, as marked on the busts, when she instantly evinced the emotion in the most active manner, saying, " poor creature, poor creature," and not content, as many are, with mere *words* of compassion, she anxiously presented us with all the money in her pocket. I should not omit to add, that this patient is quite *un*conscious of all she or others do or say whilst in this state, and did not know the location of a single organ.

It would only be an unnecessary waste of time to detail at length all the cases I have had since of similar manifestations, varying in degree according to the original constitution and habit of mind of each patient. This variety is the most striking proof of the reality of the phenomena. There are some patients who have a sort of indistinct recollection of what had passed, as if it had been a dream ; two in particular, who observed they had an indistinct notion of what they were doing, but felt irresistibly impelled, as it were, to do certain things, even whilst they thought complying with the predominant inclination would make them very ridiculous. This, I presume, referred to imitation and comicality, and such like humorous faculties, which they displayed in a very remarkable degree. These patients are highly respectable and intelligent, and manifested the phe-

nomena quite as prominently as the patient last named, that of veneration and hope, also filial affection, in a manner baffling description. Each knew only one phrenological organ.

That I might be the better certified that all was reality, I also got a relation of my own to submit to the operation, and it was quite conclusive. She has a slight recollection of *some* things which were said and done, but of others seems quite oblivious.

I had also the opportunity of verifying the truthfulness of these various and interesting phenomena through the kindness of Mrs Col. ———, who submitted to be operated on by me in presence of her husband, as also the Major; the Captain and Surgeon of the regiment; a high dignitary of the church, and who is also an eminently scientific gentleman; Mr Gardom, surgeon, and other professional gentlemen; Mr Aspinal Turner, and a number of others, both ladies and gentlemen. In about three minutes after she was asleep, I placed two fingers over the point named veneration, instantly the aspect of her countenance changed; in a little she slowly, and solemnly, and majestically arose from her chair, advanced towards the table in the middle of the room, and softly sank on her knees, and exhibited such a picture of devout adoration as can never be forgotten by any who had the gratification to witness it. She was tested with a number of other faculties, when the corresponding manifestations were equally striking and characteristic. When awakened, this lady was quite unconscious of all which had happened.

Here, then, we have the testimony of a lady of the highest respectability and intelligence, and energy of

mind, corroborating, both in word and action, and look, the reality of the phenomena as exhibited by others, and that in the presence of most respectable and intelligent witnesses, who can bear testimony that there was nothing said or done to direct her in the important manifestations. This lady had been hypnotized by me once before, for a few minutes, at a private conversazione the week before, when she sat down fully convinced she could NOT be affected, but was soon made to acknowledge the power of hypnotism, and now she was a valuable evidence to the more novel investigation as to how far phrenological manifestations could be developed during hypnotism.* I have now realized these phenomena very prominently in forty-five patients, most of whom, I am quite certain, knew nothing of phrenology, some of them not even what the word meant; and the smallness of the points to which the contact must be made to elicit the manifestations correctly, especially the subdivisions by Mr Hall, is such as to

* A report having been circulated, no doubt with the view of neutralizing the interest attaching to the case, that this lady was a phrenologist, I called to inquire whether there was any ground for such a report. Mrs S. herself assured me it was quite erroneous, for it was a subject she had never paid any attention to, and one she was quite ignorant of. Wishing to be very circumstantially correct in the statement, she added, "I have understood the organ of music is somewhere about the forehead;" when requested to place her finger on the organ, she was quite wrong, so that *she did not know a single organ.* I mentioned this circumstance, in her presence, at another conversazione, when she most distinctly declared the facts here recorded, to be strictly correct.

render collusion most improbable. I was also careful to avoid prompting, by putting leading questions. I have also succeeded partially with others; and several of my friends have also been successful with a few other cases.

I attended Mr Hall's public lectures, and the very first experiment he tried, February 24, 1843, convinced me, that the reason why I had not sooner obtained the manifestations more generally was, because I had allowed my patients to pass into the *supersentient* state before testing them. I was aware of the difference in the state of the circulation through the brain in the state in which my patients were, and what it must be in the state in which his were during his operations, and conjectured, that by trying my patients in *that* condition, I might get manifestations which I had failed to do at former trials; and the very first cases I tried proved this conjecture to be correct. For example, No. II. already referred to, exhibited a number of additional phenomena beautifully; and Cases IV. and V. in like manner, came out beautifully. From this single observation on Mr Hall's mode, or rather *time*, of operating, I have been enabled to arrive at a mode of operating which, I believe, by putting patients into the hypnotic condition my own way, there will be no great difficulty in manifesting some of the phenomena in most cases. There are some patients, however, who will evince them much more prominently than others, and the power of habit seems evident in most, being more readily operated on after a few trials. Some, however, seem as perfect as possible at the first trial.

I have tried several private friends, on whose intelligence, honour, and integrity, I could rely, and also children, and have found the evidence so satisfactory, that I am quite certain as to the reality of the phenomena; but as to my theoretical views, I wish them to be considered as mere conjectures, thrown out for the purpose of exciting others to think, and investigate this curious and most interesting and important subject.

I shall conclude this article by calling the attention of my readers to the coincidence which appears to subsist betwixt the phenomena now referred to, and the mode of exciting dreaming, in some patients, by whispering in their ears. I shall illustrate that by reference to a case recorded in one of Dr Abercrombie's valuablo works, on the authority of the late Dr Gregory. It is that of the case of an officer in the expedition to Louisburgh in 1758. His brother officers were in the habit of amusing themselves at his expense. They could produce any kind of dream they chose, especially if done by one with whose voice he was familiar. Thus, at one time, they conducted him through the whole process of a quarrel, ending in a duel; and when it was supposed the parties met, a pistol was put in his hand, which he fired, and was awakened by its report. On another occasion, being asleep on the locker of the cabin, he was made to believe that he had fallen overboard, and was told to save himself by swimming. He imitated the art of swimming, when they told him to dive for his life, as a shark was pursuing him, which he attempted so energetically, that he threw himself from the locker, by which he bruised himself

severely. Again, after the landing of the army, he was found one day asleep in his tent, and apparently much annoyed with tho noise of the cannonading then going on briskly. He was made to believe he was engaged with the enemy, when he expressed much fear, and betrayed a wish to run away. They remonstrated against this act of cowardice, whilst they increased his alarm by imitating the groans of the wounded ; and when ho inquired who was killed, which he often did, they named his particular friends. At last he was told that the man next him in the line had fallen, when he instantly sprang from his bed, rushed out of the tent, and was aroused from his sleep, and relieved from his fears, by falling over the tent ropes. It is added, that after these experiments, he had no distinct recollection of his dreams, but only a confused feeling of oppression or fatigue ; and used to say to his friends, that he was sure they had been playing him some tricks.

I shall add one illustration as to the probability of benefit accruing to society from this subject being prosecuted with zeal and due consideration. A highly scientific friend, who had honoured me with his presence at a private conversazione, called two days thereafter, and stated, that from reflecting on what I had said and exhibited the day before as to the mode of exciting certain points or functions of the brain through acting on certain points of the scalp and face, it appeared to him most reasonable to expect, that by applying treatment to *such* points, we might most readily afford relief to disorder of the corresponding internal organs. I told him I was so thoroughly convinced of that, as to have been induced to act

accordingly; and that the daybefore I had been visiting an insane patient, who entertained the horrible idea, that she must murder every body she knew, and then murder herself also; that on placing my hand upon the organs of combativeness and destructiveness, in a few seconds, she gave a violent shudder, and seemed greatly excited, and becoming perfectly furious. On examining these parts, I found the integuments quite red. I ordered leeches, and cold lotion afterwards, but next day she remained equally violent, and the pulse between 140 and 150, which it had been for some time, notwithstanding medicines had been given to depress it. I now made an incision an inch and a half long through the integuments, and down to the bone, and in twelve hours after found her much calmer, and the pulse down to 100, and it remained there for several days. There was no such loss of blood as could have acted constitutionally on the heart directly by the quantity effused. On again rising, Belladonna plasters were applied — these not having the desired effect, recourse was again had to scarification behind both ears, and with great success, as in a few days she was so calm as not to require the strait jacket, and for two months has been sullen but harmless.

At another conversazione, the same gentleman requested me to excite philoprogenitiveness, which I did, and he then asked me to combine destructiveness along with it. I told him the faculty would not be developed, because the organ was so small in this patient as to make her always imagine some one was quarrelling with her. Still he wished me to try, which I did, and the result was

that she immediately seemed distressed about some one being angry *with the children*. Two days after I was informed that the object of the request was to prove that *such would be the case*, as he had whispered to a professional gentleman present, before the answer was elicited, and no one else in the room knew this remark. Two days after, on a slip of paper handed to me by the same gentleman, he had noted, that if I would excite the same organs in another patient, whose destructiveness was more prominent, I would find she would be angry with the children, and wish to punish or send them away, and assuredly it proved so. He also added, that this is the combination of morbid excitement which he conjectured, and I think with great justice, is the cause of parents murdering their own children during a fit of insanity. An example of more acute, beautiful, and successful induction than this could scarcely be conceived possible; and it is highly gratifying to know that the opinions of a gentleman of such talents and attainments coincides so much with my general views on this subject.

The doctrine propounded by the Rev. La Roy Sunderland, and Mr Spencer T. Hall, and others, seems to be this, that there is a separate organ in the brain for every mental faculty, emotion, propensity, desire, and action, mental or corporeal; that every positive organ has also its negative organ proximate; and that by certain manipulations during the mesmeric state, these organs may be stimulated into activity singly or combined, and thus caused to manifest the corresponding faculty by thought, word, and action. They do not deny the correctness of the outlines as given by former

phrenologists; on the contrary, they bear positive testimony to their general correctness. However, they subdivide each of the former faculties, which we may designate the pure faculties, into groups of distinct organs, for the specific manifestation of special faculties, the tendencies to which were naturally included in the simple or primitive general organ; and they allege they can thus give such a special or characteristic direction to the feeling as to entitle it to be considered as the manifestation of a distinct organ or faculty.

It occurs to me, that this might be much simplified, by considering, that on the central point of the *general* organ, we stimulate fasciculi of nerves connected with a general manifestation, for example, benevolence; but that, as we approach the surrounding organs, we partially excite proximate faculties, from some of their corresponding peripheral sentient nerves co-mingling with those of the *other* faculty, and thus engender a mixed manifestation; just as we find the intercourse between neighbouring countries modifies the national character which peculiarly belongs to each nation. Thus, in one direction, benevolence (by which I illustrate my position) will be blended with comparison, or excited through the influence of association respecting some one we have known, or from supposing what might be our feelings were we placed in such and such circumstances; in another direction, it will be influenced more or less by the tendency to imitate the benevolent acts of others, and, as we approach veneration, it will partake more of a religious and moral obligation in reference to the Deity. If I am right in this conjecture, of course there will be every

possible shade of manifestation as we approach nearer to the adjoining organ. I am not acquainted with the mapping of the head either by La Roy Sunderland or Mr Hall; but, if the original compartments are to be so divided and subdivided, according to the mere varieties of manifestation during the hypnotic state, I feel assured, that each of their *subdivisions* may be again *divided*, as a shade of difference will be manifested by every possible change in the point of contact.

I had much pleasure in witnessing Mr Hall's experiments, and bore public testimony to the reality of the general phenomena. This I could have done from the mere circumstance of carefully watching the peculiar expression of countenance, and state of the respiration, induced by every move of the point of contact. The shades of difference were so minute that collusion was all but impossible. Moreover, I had personal experience of the reality of the leading phenomena in a number of my own patients, with parties who knew nothing of phrenology, and whose respectability and known character placed them above the possibility of being suspected as acting a part, either for the purpose of gratifying or deceiving others. Whilst I readily bear testimony to the reality of the phenomena, and that I saw nothing in Mr Hall to lead me to suppose he wished to deceive any one, it is due to the cause of truth for me to state, that the varieties which I observed in his phenomena and those occurring in my own patients, I consider were the mere results of the different manipulations used, and not of any such *special* influence as he and other animal magnetizers allege.

In reference to the phenomena which were designated "cross-magnetizing," and which appeared most distressing to the patients, as well as to the operator, (fortunately no such effects have ever occurred in my patients,) I think they may be explained thus: it seems probable, part may be the result of imagination, or an accidental circumstance exciting the opposing classes of muscles into action at the same time. This may also be caused by exciting two antagonist emotions, such as one requiring the energetic action of the muscles of inspiration, and the other the muscles of expiration, the consequence of which is, very speedily to throw the patient into a state of partial asphyxia; and the result must be, a great difficulty in restoring the patient from the deleterious influence of insufficiently decarbonised blood circulating through the brain. Such I consider was the case with the patient I saw create so much trouble to Mr Hall on the evening of the 24th February, 1843, in the lecture-room of the Athenæum, Manchester.

Having heard Mr Hall state, that patients who had stolen any thing would always seek out the persons from whom it had been taken, and restore it to them after conscientiousness was excited, and that they would find out the rightful owner whatever part of the room he had removed to, I was curious to prove this. My first object was to ascertain whether it was a fact, which I very soon did with my own patients, and my next object was to ascertain *by what means they accomplished this*, and I readily determined it was *by smell* and *touch*. The first thing they did, on rousing conscientiousness, was to look thoughtful,

then they began sniffing, and traced out the parties robbed, and restored it to them. When asked, what are you doing? the answer was, "I am giving back something which I had stolen." On being asked, how do you know the person? (having gone to the opposite side of the room,) the answer was, "I smell them, or him." Every time the experiment was tried, the result was the same, and the answer the same, as was obvious to every one in the room. Another patient did the same *when the sense of smell was acute*, but when I tried the experiment with the *sense of smell dulled*, the stolen article was *merely laid down*, without giving it to the proper person. There was thus both positive and negative proof of exalted smell being the cause of them restoring to the proper party; and feeling directs as to place. I have found this done with the same promptitude and certainty when six, eight, or twelve faculties had been roused and manifested before conscientiousness was excited. I have found this the same in all I have tried, only some will throw the articles down as if horror-struck.

The movement of the jaws also, and various other movements in imitation of the operator, I have ascertained arise from their remarkable power of hearing *extremely faint sounds*, and the most curious point is this, that they seem to have the power of discerning such *faint sounds*, when they seem not to be affected by *very loud* sounds. It is also the same with feeling. They will in some states be insensible to pricking, pinching, or maiming, but so highly sensible to a breath of air, or the tickling of a feather, that they may be instantly roused by the latter

means, when the former would have no such influence. Probably this is the cause of the remarkable effects of a current of air, its rousing cutaneous sensibility, directing the nervous influence to the skin, and withdrawing it from rigid muscles, thus reducing the cataleptiform state, and permitting the blood and *vis nervosa* to flow in their usual manner. The latter change being induced gradually, may probably be the cause of the feeling which is described as that of needles and pins running into the extremities, and producing twitching, when gently pressing on the extremity with the finger, &c. as already noticed.

In concluding this chapter, I am well aware the statements it contains must appear startling, and almost beyond belief, to many of my readers. Some may be disposed to think I have been deceived; and because many of the manifestations *might* be simulated, I know it has been alleged, that the patients of those who have been exhibited publicly, were either deceiving the operator, or that both patients and operators were engaged in a shameful system of collusion. In respect to my own patients, I have endeavoured to take every possible precaution that they should *not* deceive me, and with this view have invited the most sceptical persons I know, both in the profession and out of it, to have it *rigorously* tested, and the result has been my entire conviction as to the reality of the phenomena in my *own* patients, and I am ready to believe others to be as candid as myself. Because much *might* be simulated, and parties have been avowedly trained and exhibited to prove the dexterity of teachers and pupils in a system of avowed collusion, that it might thereby be

inferred the patients exhibited by other lecturers were impostors, is a most illogical mode of deciding such a question. There ought to be positive proof of the justice of such imputation, before so assailing any one, when there is so much proof to the contrary, as has been furnished by the concurrent testimony of so many experimenters who have met with such susceptible subjects. Surely it would not be fair to infer, that because some are trained as dexterous thieves, there can, therefore, be no such thing as an honest man in the world?

The question to be decided here is not what patients can be trained to do in violation to nature's laws; that is, by giving them some stronger motive of action, by artificial means, than the impulse arising from natural feeling. What might be achieved in this way I know not, as I have not tried such experiments connected with this branch of the subject. It is well known, however, that so long ago as December, 1841, I particularly pointed out the remarkable docility of patients during Hypnotism, which made them most anxious to comply with every proper request or supposed wish of others. I have, therefore, no more doubt that they might be trained to manifest, during Hypnotism, opposite tendencies, in accordance with conventional arrangements, than that during their waking moments they could be taught to do so, and thus call black white and white black, night day and day night, and such like, in respect to every custom, word, or action. The proper question to be determined seems to me to be this, — Can the passions, and emotions, and intellectual faculties, be excited during Hypnotism simply by contact or friction over

certain sympathetic points of the head and face, without previous knowledge of phrenology, training, or whispering, or such leading questions as must naturally excite in the mind such passions, emotions, or mental and bodily manifestations? My own experience warrants me to answer in the affirmative, and I shall give a few additional cases in illustration of the data from which I have come to this conclusion.

Two patients, healthy, strong servant girls, entirely ignorant of phrenology, neither of whom had ever seen an experiment, and one was so sceptical, as to wish to try and convince me *she could not be hypnotized at all*, were operated on separately. At first trial, I succeeded in hypnotizing both, and in developing a great number of the leading organs, such as the desire to eat, benevolence, friendship, pity, attachment, self-esteem, love of approbation, imitation, (when they readily spoke five languages correctly,) stealing under acquisitiveness, and under conscientiousness restored to the proper person and place what was stolen; eventuality most remarkable; this was tried twice or thrice in each, when they could tell correctly the events of the previous day while the organ was excited, whereas they could not tell a single circumstance before it was stimulated; and a number of others, such as forms, figures, and colours, by exciting the corresponding points. These experiments were tried before several friends, who were astonished with the result, several of the most remarkable manifestations being evinced without a single word being spoken by any one. They were not tried at the same time, and neither saw nor knew of the other.

Mr T., a gentleman of 45 years of age, who was ignorant of phrenology, and had never seen a phreno-hypnotic experiment, was hypnotized without expecting any experiment of the kind to be tried. On touching "benevolence" the manifestation was so powerful as to compel me quickly to desist; "self-esteem," very decided; "ideality," very decided, combined with "tune and language," he sang when the latter were pressed on, but instantly stopped when the pressure was removed, and resumed as readily on renewing the contact, exactly at the same note and word where he left off. Also the usual spectra when the region of the orbit was pressed on. When aroused, he was quite unconscious of all which had happened. He has been tried three times, with the same results, only that additional manifestations came out. His friends, who were present, can testify he had no signal given to lead him to do so. His wife, also, who had never seen any thing of the kind before, was operated on, when a great many manifestations came out most decidedly. Their daughter, who had seen nothing of this, was now called into the room, and operated on, and exhibited a great many manifestations, and all this by the mere effect of pressure and gentle friction on the integuments. None of the three remembered any thing of what had happened.

W. T. a boy, had been magnetized, and exhibited a few manifestations. He was again tried in public, but without success. I was requested to try him, when a number of manifestations came out at once beautifully — under benevolence, he took off his coat to give to some distressed person, and after a number of other manifestations had been educed, on being

awakened he seemed very much surprised to find his coat off.

John W., 22 years of age, had been magnetized publicly, with the hope of eliciting the phrenological manifestations, but he became so stolid that it was quite a failure. I was afterwards requested to try him, in my way, in the presence of a number of gentlemen, when I at once succeeded in exciting several; pity was so characteristic, that there could be no difficulty or doubt on the subject, as it was not only exhibited by his features and sobbing, but by the tears which ran over his face in torrents. On trying to excite imitation, on the right side, no effect was produced, which I suspected to be the result of an injury he had sustained, which had destroyed the integuments, and also caused exfoliation of the outer table of the skull. I therefore tried in the opposite side of the cranium, when the faculty was manifested beautifully. This seems a good corroboration of my theory, that it arises from the peculiar condition of the nerves of the scalp. On farther trials many more came out without any cause beyond the simple excitation of the integuments by pressure and friction. Not only may such general manifestations be thus excited, but, what is far more curious, by exciting *antagonist* points in the *opposite hemispheres* of the brain, the patients may be made to exhibit correspondingly opposite feelings in the different sides of the body. If the antagonist faculties are excited on the *same* side, there will be exhibited only the *stronger of the two*. These "opposite influences on the two sides," as Dr Elliotson has well remarked, "are the most astonishing and beautiful experiments that all

physiology affords ;" and are also the most beautiful examples of the correctness of Mr Mayo's fifteenth aphorism, at page 28 of his Nervous System and its Functions, where he says, "Each lateral half of a vertebral animal is separately vitalized. Or the preservation of consciousness in one half is independent of its preservation in the other." It is true that vivisections have proved this, but neither so beautifully nor humanely as in the experiments I now refer to, and those already recorded at page 63 of this treatise. Miss S., a lady who had never seen a phreno-hypnotic experiment, and knew nothing of phrenology, exhibited at first trial a great number of the leading manifestations, and at a second and third, these opposite ones in a remarkable manner. Under friendship and adhesiveness, she embraced a female friend in the most affectionate manner, and on destructiveness being excited *on the opposite side of the head*, she rushed forward with great impetuosity to repel some imaginary adversary, whilst, with her other arm and hand, she contrived to shield her friend. Had I not laid hold of her, she would most certainly have rushed through the window. On being roused she was quite oblivious of all she had done. Mrs C. another equally ignorant of the subject, displayed the same phenomena. The effect of music in exciting to ecstasy, elegance of movement, and graceful dancing, was most remarkable. Remembered nothing. Miss ——, entirely ignorant of the subject, and had never seen an experiment of the kind, and expected only to be *attempted* to be hypnotized, but whilst she wished to be tried, she had expressed to the friend who introduced her, that she

could not be made to sleep. She exhibited veneration solemnly, with hope, glowing devotion, and with ideality and language, overwhelming ecstasy, expressing her happiness and prospect of entering into heaven; "self-esteem," the most conceited prude; "firmness" most decided; "adhesiveness and friendship," and this in one side, and "combativeness and destructiveness" on the other at pleasure; "imitation" in perfection, speaking correctly every language tried, "benevolence" extremely marked, to the effusion of tears; "acquisitiveness, conscientiousness, eventuality, the desire to eat, to smell, spectra," &c. &c. She was quite unconscious of all that had happened, and the friend who brought her to me knows she had no prompting. She has been tried once since with the same results.

Some parties, who were excellent critics, after seeing the latter and two others operated on, and expressing their utter astonishment with the accurate and natural manner in which every passion and emotion was manifested, expressed a strong desire to see some one operated on for the first time. I offered to operate on any of three young ladies whom they had introduced to me that afternoon, and whom I had not known previously; indeed, one was a stranger in town, from the south of England, who knew nothing of hypnotism or phrenology, and had no faith in either, notwithstanding what she had just seen. She, Miss S., sat down an entire sceptic, but in a few minutes she was not only most decidedly hypnotized, but also one of the most beautiful and decided examples which could possibly have been met with of the phrenological sway during hypnotism, simply by

stimulating the nerves of the scalp and face. The moment "veneration" was touched, her features assumed the peculiar expression of that feeling, the hands were clasped, she sank on her knees in the attitude of the most devout adoration; combined with "hope," the features were illuminated, and beamed with a feeling of ecstasy, the hands being unclasped and moved about in the utmost delight; and when "ideality" was added, the ecstasy was so extreme as scarcely to be supportable. On changing the point of contact to "firmness," she instantly arose, and stood with an attitude of defiance; "self-esteem," flounced about with the utmost self-importance; the "love of approbation" was painted to the greatest perfection; "imitation" imitated accurately every thing done or spoken in any language; "friendship and adhesiveness," clasped hold of me; and by stimulating "combativeness" on the opposite side of the head, along with the other, she struck out with the arm of the side on which combativeness had been touched, but held me fast, as if to protect me, with the other. Under "benevolence," she seemed much affected, and distributed her property to the imaginary distressed objects her fancy had painted; under "acquisitiveness" she stole, and under "conscientiousness" she restored; "tune," the desire for music, and sang beautifully, a waltz being played, she danced with a grace and elegance surpassing all which any of us ever witnessed. Eventuality was also most remarkable; the desire to eat, to smell, was also excited; also form, figures, colours, &c.; philoprogenitiveness admirable. All this was done at first trial, with an entire stranger, and the lady's immediate friends, as well as

others present, can bear testimony that there was not the slightest prompting either by one or other, and when awakened she was quite unconscious of all which had happened. This lady has been twice operated on since, when all these manifestations, and many others, were exhibited in the most perfect manner, as can be certified by Sir Thomas Arbuthnot, Major Wilbraham, Colonel Wemyss, the Rev. Mr P., and another high dignitary of the church, and the patient's family and friends; and that when under "number" she wrote down a sum, and under "constructiveness and ideality," she drew a very good sketch of a cottage, putting in doors and windows correctly. The uncle of the latter subject was so much astonished and gratified with what he had seen, that he begged I would try one of his daughters. I hypnotized the eldest, and all the manifestations came out quite as decidedly as in her cousin. Under "adhesiveness and friendship," she clasped me, and on stimulating the organ of "combativeness" on the opposite side of the head, with the arm of that side she struck two gentlemen (whom she imagined were about to attack me,) in such a manner as nearly laid one on the floor, whilst with the other arm she held me in the most friendly manner. Under "benevolence," she seemed quite overwhelmed with compassion; "acquisitiveness," stole greedily all she could lay her hands on, which was retained whilst I excited many other manifestations, but the moment my fingers touched "conscientiousness," she threw all she had stolen on the floor, as if horror-stricken, and burst into a flood of tears; on being asked, Why do you cry, she said, with the utmost agony, "I have

done what was wrong, I have done what was wrong." I now excited "imitation and ideality," and had her laughing and dancing in an instant. On exciting form and ideality, she seemed alarmed, and when asked what she saw, she answered, "The D—l." What colour is he? "Black." On pressing the eyebrow, and repeating the question, the answer was, "red," and the whole body instantly became rigid, and the face the most complete picture of horror which could be imagined. "Destructiveness," which is largely developed, being touched, she struck her father such a blow on the chest as nearly laid him on the floor. Had I not endeavoured to restrain her, he must have sustained serious injury. Having now excited veneration, hope, ideality, and language, we had the most striking example imaginable of extreme ecstasy, and on being aroused, she was quite unconscious of all that had happened, excepting that she had heard music, and had been dancing. Her philoprogenitiveness was admirable.*

* There were a dozen present on this occasion, of whom Mr Vandenhoff was one. Being well known as an accomplished artist, I requested him to watch all he saw with the most critical attention, and to tell me whether the passions were painted naturally or the contrary. After witnessing the first case with evident delight and surprise, he made the following observation,—"*If* this is *acting*, it is the *most perfect acting I have ever seen.* In acting, we aim at being natural, but there is generally some point in which we fail; but here I see nature's language in *every* point." Similar expressions followed, in what was seen in the next two cases, and when he witnessed the effects on the two ladies, whose cases have just been recorded, he confessed himself so overpowered, as to

At a conversazione a few days after, in the presence of Lady S., Sir Thomas Arbuthnot, Colonel Arbuthnot, Major Wilbraham, John Frederick Foster, Esq. Chairman of the Quarter Sessions, D. Maude, Esq. stipendiary magistrate, and many others, both gentlemen and ladies, after exhibiting the phenomena on those who had been previously tested, there was a wish expressed to see some one operated on *for the first time.* I offered to try any one present, and a lady at length consented, whom I never saw before that day, nor since. She exhibited all the usual phenomena very decidedly. Under "acquisitiveness," she stole two handkerchiefs from ladies, and a ring from Mr Foster's finger. After several manifestations had

be scarcely capable of expressing his feelings of delight and astonishment, but said he should write me on the subject. The following is part of a letter I received from him two days after,—"I thank you for your kind invitation to witness a repetition of those experiments which so much delighted me on Saturday last, and with the result of which I was no less gratified than astonished. Never have I seen nature manifesting herself more distinctly — never *so beautifully*, as in the course of the exhibition on that evening. I believe you know I was a decided sceptic in the mesmeric influence — and I was something more in relation to its phrenological sway — of which the manifestations while under its mysterious influence, by the two young ladies of my own immediate acquaintance, who had not, who could not have had, any knowledge of the subject prior to their experience on that evening, have perfectly convinced me by their truthfulness. I may take a farther opportunity to dilate more fully upon this interesting and wonderful discovery, the beneficial results of which cannot yet be appreciated, because we know not to what extent they may be carried out."

been exhibited, the moment I touched "conscientiousness," she seemed distressed, and set off and searched out the proper parties to whom to restore the respective articles. They had changed places, but she found them out, and gave back the handkerchiefs to their owners, and also put the ring on the very finger of Mr Foster from which she had taken it. She was a strict methodist, who had never danced in her life, and who, if awake, would have considered it a sin to dance. However, under the excitement of suitable music, she cut a very good figure at waltzing. When awakened, she remembered nothing of all which had happened.

Miss L., a lady of twenty-one years of age, very accomplished, and with great energy of mind, braved me to try to hypnotize her. She felt assured I could not do so. However, she was very soon under the influence, and gave twenty manifestations in the most decided manner. Under friendship and adhesiveness, and destructiveness on the opposite side, she protected me, and struck her own mother. She knew only one organ, and was inclined to scoff at Hypnotism, and still more so at phreno-hypnotism. Under form and ideality she wrote very nicely, without the use of her eyes, but by no means equal to what she does when awake. When awakened she seemed surprised when told what had happened. She remembered me touching her head, wondered what I was doing it for, said she felt different impulses arise when I was manipulating different parts, but did not know why, nor could she remember what she had done.

A married lady, Mrs E., and the mother of a family, would not believe any one could be so af-

fected. After seeing one patient done, she still felt assured *she*, at least, could not be so operated on. I desired her to try, and she at once exhibited upwards of twenty manifestations in the most distinct manner, some of them very strikingly. Under benevolence she shed tears, drew out her purse, and gave half-a-crown "to the poor creatures." She also exhibited the opposite tendencies at the same time, as already described.

Miss R., a young lady of 22 years of age, very well educated, and intelligent, wished to be tried, because she was decidedly sceptical. It so happened that every manifestation tried came out beautifully and prominently, although, when aroused, she admitted she remembered every thing she had done, and added, that she had resisted to the utmost of her power doing any thing, but felt irresistible impulses come over her to act in the way she did, as I touched certain points, but *why* it was she could not tell. Declared it was not from any association with what ought to be the case, as she was ignorant of the organs, but added, that she first felt a drawing in the muscles of the face, and then the breathing became affected, and with this the peculiar impulse followed. On another occasion, with the eyes bandaged, she had a pencil put in her right hand, when a number of organs were excited, but she showed no evidence of any desire to use the pencil till "constructiveness and ideality" were excited. The moment this was done, however, she scrambled till she got some paper, and began drawing, and made a very tolerable profile. When "acquisitiveness" was excited, she stole a ring off Mr Foster's finger, who, while I was exciting various manifestations, left the

room. The moment I touched "conscientiousness," she set off in search of Mr Foster, walked round the room the very way he went, then left that room, crossed the lobby into the front parlour, and having made a gyration in this room, she came out and went into a back parlour, where she found Mr Foster, and put the ring on the very finger from whence she took it. She evidently traced him through the air by smell, as she followed the exact track he had taken, for he had first gone into the front parlour. Had it been by clairvoyance, she of course ought to have gone to him direct, and by the shortest way. Such facts are almost past belief, but here they are as they happened, and there could not have been more competent individuals, than those present, to detect any mistake or deception, namely, Mr Foster, Mr Brandt, and Mr Lloyd, barristers; Mr Langton, Mr Bagshaw, Mr Schwabe, and many others, both gentlemen and ladies.

Miss W., a very intelligent lady, who knew nothing of phrenology, and had never seen a phreno-hypnotic experiment, was operated on. On "benevolence" being excited, she seemed very distressed, and when asked what she was thinking of, said it was of a poor man who had lost his saw and hammer, that he had no money to purchase others with, and his children were starving. Under "veneration and ideality," wished to die, to go to heaven; under combativeness, first looked very angry, then jumped up and gave a blow, which upset the candlestick. On "destructiveness" being excited, (after she had exhibited several other organs,) she shook her fist, then started on her feet, looked furious, and sprang across the room, her arm

at full length, similar to a person fencing, and seized hold of a young lady's hand, and nearly transfixed it with her nails.

Mr Walker, twenty-two years of age, after passing into the hypnotic state, shewed no symptoms of susceptibility for some time, but at length he did so in the most perfect manner; namely, benevolence, veneration, firmness, self-esteem, combativeness, destructiveness, acquisitiveness, caution, conscientiousness, imitation in perfection, pity, benevolence with the one side, and destructiveness on the other, eventuality, smell, form, colours, number, ideality, &c. This gentleman has seen busts and phreno-hypnotic experiments also, but, excepting two or three, would be puzzled to point out any of the organs correctly when awake. He remembered nothing of what had passed.

Being desirous of ascertaining whether he might not, during hypnotism, remember the organs better than whilst awake, and thus be led to give the manifestations in the manner he did, I tried the following experiment. I explained my intentions to the friends who were to be present, but he was entirely ignorant of them. He had never seen or heard of such experiment having been tried. When I considered him in the proper condition, I requested him to place the point of a finger on different organs, but it was remarkable that he was wrong *in every* instance, even with respect to the few he knew when awake. Another most interesting fact was discovered, that whilst his mind was directed to the organ I had named, the *true* manifestation of *the point touched* came out *in every instance.* Thus, when requested

to point out ideality, he placed the finger over "veneration," and immediately indicated that feeling. When asked what he was thinking about? "I did not go to church yesterday." What of that? "It was wrong." When he accidentally pressed on benevolence, the feeling was manifested; firmness in like manner; self-esteem in a powerful degree. On evincing symptoms of uneasiness, I asked what he was thinking of? he replied, "something hurts my head." The fact was, his arm had become cataleptiform, and the points of the fingers were pressed so strongly against the scalp as to be the cause of complaint, but he had no idea of that. His hand having rested on philoprogenitiveness, he began to hush and rock on his chair as if nursing a baby, his motion became more and more violent till I judged it necessary to put a stop to it, by removing his hand. However, I found his arm and neck had both become so rigid, that they were too firmly fixed to permit of being separated by mechanical force, but so soon as this was reduced, by blowing on them, the peculiar manifestation ceased. Every point pressed on by him shewed the same tendency to excite its peculiar manifestation. I am quite certain this gentleman acted a candid part, and could not be induced to do otherwise by any one.

Another most interesting fact connected with the latter case, was the circumstance of his having hypnotized himself, excited the different manifestations as stated; and on being requested to rub his eyes, he did so, and thus roused himself from the hypnotic condition. I have tried similar experiments with many other patients, and, with the exception of

two, each of whom hit upon one organ, have found none of them could point accurately to the organ named, but in every instance the usual indication of the peculiar organ touched came out. None of these subjects remembered any thing of what had happened. Here, then, we have decided proof, that all the phenomena of hypnotizing, exciting the phrenological manifestations, and rousing to the waking condition, may be accomplished by the personal acts of the patient on himself, as the only influence required to excite him to the necessary movement might be conveyed by an automaton.

A few days ago, one of these patients, who knows no foreign language, when imitation and tune were excited, followed correctly both the music and words of Italian, French, and German songs, which she never heard till they were played and sung by the wife of a learned barrister, who was also present himself, and who, with the Rev. Mr F. and his lady, can bear testimony to the great accuracy of her performance. Such is the power of Hypnotism.

Besides the twenty-five cases here briefly recorded, I have had many more exhibiting the phenomena in the same decided manner, simply by exciting the sympathetic points by contact. If I am to believe the evidence of my senses, therefore, *in any thing*, I cannot see how I can doubt the relation which subsists between certain points of the cranium, and the mental manifestations, which are excited by acting on them during Hypnotism. I believe there are very few physiological phenomena which can be more clearly demonstrated, especially at such an early stage of their investigation. Were it not that I consider it

would only be an unnecessary waste of time to prosecute the investigation farther, after the number of most unequivocal cases which have been met with by myself, as well as by other experimentalists here and elsewhere, I feel convinced I might soon increase the number of my own cases to any extent I chose.

With all intelligent and honest experimentalists I anticipate similar results to what happened with Mr Ebbage, an intelligent surgeon at Leamington. He had been a determined sceptic, and had much annoyed several of our mutual friends by his strong expressions to that effect. However, whilst on a visit at Manchester lately, at our first interview, I made a convert of him by offering to exhibit the phenomena in his own wife, who had never been so operated on, or even tried the experiment. She soon became decidedly hypnotized, and also exhibited several phrenological manifestations most distinctly. A servant of the family was now called into the room, who had seen no operation of the kind, and did not know what was to be done. She also became decidedly hypnotized, and exhibited several phrenological manifestations most distinctly. Mr E. now admitted that rational scepticism could not resist such conclusive evidence; and having seen another case or two at my house, of remarkably susceptible subjects, with instructions from me how to operate, he promised to prosecute the inquiry on his return home.

In a letter to me, dated 1st May, 1843, he writes that he had tried the experiments with several; that in some he was unsuccessful, while "in others a perfect state of sleep and unconsciousness was produced at different periods, varying from two to ten minutes.

In the case of one lady, who had never seen any thing of the kind before, and, I may add, had not even heard it spoken of as connected with any phrenological developments, the most marked effects were soon produced, resembling very strongly the case you shewed me when I was at your house." He farther adds the following judicious remarks: — "I must say the peculiar development shewn by the influence of this sleep, if closely and scrutinizingly watched, must open to the mind of any thinking man a wide expanse for speculation as to the truly mysterious means by which the effects of sensation and emotion can be produced."

The above is a good illustration of what may be done, even by a determined but honest sceptic. Mr E. had only two interviews with me; and if any one should be less successful in his attempts, it behoves him to inquire whether his failures are not to be attributed to his unskilful or uncandid performance of the experiments, rather than to inefficiency of the method recommended.

As to those who will not believe the testimony of others without seeing the experiments tried before themselves, on fresh patients, I beg to remark, that the best plan is for them to try patients *fairly* themselves, and they must soon be convinced; only they must be careful to take them *at the proper time*, otherwise they may fail as I did myself at first.

The following is the mode of operating: —Put the patient into the hypnotic condition in the usual way, extend his arms for a minute or two, then replace them gently on his lap, and allow him to remain perfectly quiet for a few minutes. Let the points of one

or two fingers be now placed on the central point of any of his best developed organs, and press it very gently ; if no change of countenance or bodily movement is evinced, use gentle friction, and then in a soft voice ask what he is thinking of, what he would like, or wish to do, or what he sees, as the function of the organ may indicate ; and repeat the questions and the pressure, or contact, or friction, over the organ till an answer is elicited. If very stolid, gentle pressure on the eyeballs may be necessary to induce him to speak. If the skin is too sensitive, he may awake, in which case try again, *waiting a little longer ;* if too stolid, try again, beginning the manipulations *sooner*.

The operations should be tried again and again with the same patient, varying the time of beginning the manipulations, as it is impossible to tell, *à priori*, the exact moment they should be commenced ; and many of the best cases have only succeeded partially, or not at all, at a first or second trial. When this point has been hit upon, however, there will be little difficulty in getting out additional manifestations, and this will be still more evident at each succeeding trial.

Whispering or talking should be carefully avoided by all present, so as to leave nature to manifest herself in her own way, influenced only by the stimulus conveyed through the nerves of touch exciting to automatic muscular action. We all know that during common sleep a person unconsciously changes from an *un*comfortable position to one which is agreeable. This is a sort of instinctive action, and, as already explained, I think it highly probable, that by thus calling into action muscles which are naturally so

exerted in manifesting any given emotion or propensity, they may, by reflection, thereby rouse that portion of the brain, the activity of which usually excites the motion. In this case there would be a sort of inversion of the ordinary sequence, what is naturally the consequence becoming the cause of cerebral and mental excitation. The following hypothesis will illustrate my meaning. It is easy to imagine, that putting a pen or pencil into the hand might excite in the mind the idea of writing or drawing; or that stimulating the gastrochnemius, which raises us on our toes, might naturally enough suggest to the mind the idea of dancing, without any other suggestion to that effect than what arises from the attitude and activity of the muscles naturally and necessarily brought into play whilst exercising such functions. However, I would very much doubt the probability of stimulating the muscles of the leg exciting the idea of writing, or that placing a pen or pencil in the hand would excite the idea of dancing, without previous concert and arrangement to that effect. It is upon the same principle, as I imagine, that, during the dreamy state of hypnotism, by stimulating the sterno-mastoid muscle, which causes an inclination of the head, the idea of friendship and shaking of hands is excited in the mind, and when the trapizus is excited at same time, the greater lateral inclination of the head manifests still greater attachment, or "adhesiveness." Philoprogenitiveness, by calling into action the recti and occipito frontalis muscles, gives the rocking motion, and hence the idea of nursing, &c.; pressure on the vertex, by calling into action all the muscles requisite to sustain

the body in the erect position, excites the idea of unyielding firmness; veneration and benevolence, from giving the tendency to stoop and suppress the breathing, thus create the corresponding feelings. By exciting the muscles of mastication into action, the idea of eating and drinking is roused, and the same may arise from pressing between the chin and under lip, which first excites a flow of saliva, and this again the motion of the tongue and jaws, with an inclination to swallow. In like manner, gently pressing the tip of the nose, by exciting inspiration, creates the desire for something to smell at; if the point of contact is the cheek, under the orbits. over the exit of the *infra*-orbital branch of the fifth pair, the breathing becomes suppressed, and depressing emotions are excited; whereas, *above* the orbit, so as to stimulate the *supra*-orbital branch of the fifth pair, generally the reverse manifestations are evinced.

Those familiar with Professor Weber's experiments, know that each of those points differs from the other in its degree of sensibility. It is remarkable that the point marked "eventuality," (and which I have strong grounds for believing is the chief seat of memory,) is in the centre of the forehead, which is one of the most sensitive parts of the scalp, and where pressure applied necessarily excites the corresponding points in *both* hemispheres of the brain at same time.

There seems, in fact, to be less matter of wonder in this discovery than some lately brought forward in other departments of physical science; for example, who would have believed, till it was proved, that by looking into a camera-obscura for a few minutes, or even seconds, he might have his likeness accurately

and indelibly transferred to a plate of metal? or the still more recent discovery of Professor Moser, that such impressions as he referred to could be effected in the dark?

I shall conclude this article by a quotation, from Dr Abercrombie, on the value of testimony. He observes, — "A very small portion of our knowledge of external things is obtained through our own senses; by far the greater part is procured through other men, and this is received by us on the evidence of testimony. While an unbounded credulity is the part of a weak mind, which never thinks nor reasons at all, an unlimited scepticism is the part of a *contracted* mind, which reasons upon imperfect data, or makes its own knowledge and extent of observation the standard and test of probability." *On the Intellectual Powers*, pp. 71, 72.

CHAPTER VII.

General resumé — Many phenomena admit of physical and chemical proof — Difficulties of comprehending many phenomena — Effects of prejudice in preventing the reception of truth — Critique on debate at Medico-Chirurgical Society on Mr Ward's operation — State of the circulation — Conjectures as to the cause of the cataleptiform condition.

Before concluding the first part of this treatise, I shall make a short resumé of what I consider the points made out by what has been advanced. 1st, That the effect of a continued fixation of the mental and visual eye in the manner, and with the concomitant circumstances pointed out, is to throw the nervous system into a new condition, accompanied with a state of somnolence, and a tendency, according to the mode of management, of exciting a variety of phenomena, very different from those we obtain either in ordinary sleep, or during the waking condition. 2d, That there is at first a state of high excitement of *all* the organs of special sense, sight excepted, and a great increase of muscular power; and that the senses afterwards become torpid in a much greater degree than what occurs in natural sleep. 3d, That in this condition we have the power of directing or concentrating

nervous energy, raising or depressing it in a remarkable degree, at will, locally or generally. 4th, That in this state, we have the power of exciting or depressing the force and frequency of the heart's action, and the state of the circulation, locally or generally, in a surprising degree. 5th, That whilst in this peculiar condition, we have the power of regulating and controlling muscular tone and energy in a remarkable manner and degree. 6th, That we also thus acquire a power of producing rapid and important changes in the state of the capillary circulation, and of the whole of the secretions and excretions of the body, as proved by the application of chemical tests. 7th, That this power can be beneficially directed to the cure of a variety of diseases which were most intractable, or altogether incurable, by ordinary treatment. 8th, That this agency may be rendered available in moderating or entirely preventing, the pain incident to patients whilst undergoing surgical operations. 9th, That during hypnotism, by manipulating the cranium and face, we can excite certain mental and bodily manifestations, according to the parts touched.

I have obtained analogous results with so many patients, as to make me quite certain of the *reality of the phenomena* referred to, and to warrant me, as I think, to draw these inferences. Many of the phenomena are of such a nature as to admit of physical and chemical proof, in respect to which, the patients cannot possibly deceive us; and as regards those phenomena where they *might* do so, I have had the assurance of so many patients, on whose veracity I can implicitly rely, proving the same facts, that there remains not

the slightest room for *me* to doubt the correctness of these statements. I have been equally anxious to avoid being myself misled, as I should be not to mislead others; and I would recommend those who have not had an opportunity of watching such phenomena, *in the most critical manner*, or who have not entered on the investigation with candid minds, to suspend their opinions until they have had such opportunity. I have no hesitation in saying it is most improbable that any man should form a just estimate in this matter from *mere reading* or *hearsay evidence*, and equally so if he does not approach it with a mind open to honest and fair investigation. The subject itself is so very subtle in its manifestations, so very different from all we are accustomed to meet with in the *ordinary* condition, that, with the utmost candour and openness for receiving the truth, and the whole truth, it will be found extremely perplexing to follow it out in many of its bearings. How then can it be expected any one should prosecute the inquiry successfully who enters on it with his mind blinded by indomitable prejudice? *

* It would perhaps be difficult to adduce a stronger proof of the extent to which prejudice may overcloud the brightest intellects, and render them incompetent to do justice to the subject they would investigate, than that which was presented at a late meeting of the Medico-Chirurgical Society of London, when a debate took place after the reading of Mr Ward's case of amputation of the leg during mesmeric sleep. As I am not an animal magnetiser, nor personally acquainted with any of the parties referred to, any remarks I am about to make are of course uninfluenced either by pique or prejudice.

As to the proximate cause of the phenomena, I believe the best plan in the present state of our knowledge, is to go on accumulating facts, and their appli-

The operation referred to was said to have taken place in a public hospital; in the presence of medical, and also non-medical witnesses. The patient is alleged to have exhibited no manifestation of feeling pain, as far as his countenance could be taken as a correct index, and there was no movement of the limbs or body; and after the operation he is said to have declared that he did not feel any *pain*, but had heard "a grunching," which it has been inferred was the noise of the sawing of the bone; and it was also admitted he had groaned during the time he was under the operation.

How was this announcement met? First, it was questioned whether the man was not a person of *little* or *no feeling* at *any* time, because *other* patients had been known, whilst wide awake, who were very insensible to pain. But had not the patient, in this case, been declared to have been suffering so much pain from his knee, that he had been unable to sleep, and that his health was so much impaired by his suffering as to render amputation of the leg indispensable? Nay, had it not been set forth, that the pain of his leg had been greatly diminished, and his sleep restored, and his health greatly improved, after he was mesmerized, *preparatory to the operation*, which he had consented to undergo whilst in that state; and yet, that after he had been asleep, and considered in a fit state for being operated on, the mere movement of the joint, whilst drawing him to the edge of the bed, was followed by *so much pain as to awake him*. Was this any proof of his being a person devoid of feeling?

Then it is held, that as he *heard*, as it is presumed he did, the *sawing* of *the bone*, he *must* have *felt* the *cutting of the skin and soft parts*. It is thus assumed that it is *impossible* for a person to *hear*, and be in the state *not to feel inflictions on the*

cation in the cure of disease, and to theorize at some future period, when we have more ample stores of facts to draw inferences from. From the first I was of

limbs at same time. It is well known, however, that disease of the trunks of the sentient nerves, or of the spinal cord, may induce such a state, independently of any lesion of the brain. But then, say others, had he *not felt* when the *principal nerve was irritated,* the *other* leg *must* have been convulsed. This is assuming, that the speakers *fully* knew *every* law which *has* been known, or *ever shall* be known of the nervous system, in *every possible condition,* which is rather a bold position to assume, and what few who have studied the subject will be disposed to accord even to the gifted individuals referred to. Others assume the non-expression of feeling was a mere matter of stoicism, and the general inference to be deduced from the whole harangues of these parties is, that the whole was a piece of collusion and deception. Had the parties intended collusion and deception, would they have admitted that the patient heard the sawing of the bone, or groaned or moaned during the operation? One gentleman, the learned editor of a medical journal, I think, admitted he was bound to believe the testimony of those who had brought the case forward, but frankly avowed, that for his own part, "*he would not have believed it, although he had seen it himself.*" When a man has attained to this state of prejudice and incredulity, of course it would be idle to adduce to him either experiment or argument.

I would beg respectfully to ask, Had the mind of any of these gentlemen never entertained the possibility of a patient, long accustomed to severe pain, moaning from habit, whilst free from pain at the moment; or even feeling pain, and manifesting the same by sensible signs *during sleep,* and yet being quite unconscious of it when he awoke? Do we never meet with similar results in conse-

opinion, that much of the excitement and many of the phenomena developed, were attributable to the altered state of the circulation in the brain and spinal cord,

quence of accidents, in the course of disease, or as the effects of over doses of narcotics? That such is the case during the artificial sleep induced by the methods I have pointed out in this treatise, I am quite certain. I am equally certain that the sensibility to pricking, and pinching, and maiming the rigid limbs, is gone, some time *before* hearing disappears. Even a piece of paper may be inserted, and retained under the eyelids, without the slightest inconvenience, not even inducing metitation. In short, I am quite certain that a patient may be sufficiently sensible to hearing to enable him to answer questions, whilst unconscious of pricking, pinching, or strong shocks of galvanism passed through the arms, and that even when roused sufficiently to give expression to feeling such inflictions, if allowed to remain quiet a little afterwards, so as to fall into the profound state again, that he may have lost all recollection of such inflictions when roused and fully awake.

From the circumstance of the patient having heard, as it is alleged he did, the sawing of the bone, I am of opinion the operation was commenced sooner than it *should* have been; and I think it very probable that the moaning referred to might have arisen from a slight feeling of pain, but not sufficient to arouse the patient, or to impress him sufficiently to enable him to remember it when awake.

In conclusion, from the numerous opportunities I have enjoyed of witnessing analogous results, in the course of my operations in Neuro-hypnotism, if I may venture to give an opinion in this matter, I have no hesitation in expressing my thorough conviction that Mr Topham, Mr Ward, and the patient, have all spoken and represented the case with the utmost good faith and candour.

and especially to the greater determination of blood to them, and all other parts not compressed by rigid muscles, arising from the difficulty, during the cataleptiform state, of the blood being propelled in due pro-

To those who wish to stifle investigation, and hold we ought to rest satisfied with the decision of the French Commission, I beg to remark, that a commission of the same learned body was appointed to investigate and to report on Harvey's discovery of the circulation of the blood, and that this most important discovery was rejected by them as a fallacy. Did their decision alter the laws of nature, or prevent the ultimate triumph of our immortal countryman? And when so much in error while investigating the more apparent and demonstrable one of the circulation of the blood, is it not quite as likely that they may have been mistaken in their decision on the still more abstruse and subtle subject of the laws and distribution of the nervous influence?

It is matter of history, in respect to the profession in our own country, that there was not a medical man in England, who had attained forty years of age, who would believe in the truth of Harvey's discovery. Is it to be wondered at, then, that Hypnotism should meet with opposition at the present time?

To conclude these remarks in respect to this operation: the fact that patients have been known, in some few instances, from natural causes which were not understood, to have undergone severe surgical operations without any sense of pain, instead of militating against the truth of the insensibility of the patient whose limb was amputated during the nervous sleep, tends directly to confirm it; for if such a remarkable state can exist from some accidental circumstances not understood, there is no reason why a similar condition may not be induced by artificial means.

portion through the rigid extremities. I have not yet seen occasion to alter this opinion ; but rather to conclude, that the ganglionic, or organic system of nerves, is *also* inordinately stimulated from the same cause, and thus having acquired an undue preponderance induces many of the remarkable phenomena which have been referred to. Whoever examines carefully the injected state of the conjunctival membrane, and of the capillary circulation in the head, face, and neck, the distended state of the jugular veins, the hard bounding throb of the carotid arteries, and the greatly increased frequency of the pulse, during the rigid condition of the limbs, cannot fail to perceive that there is great determination to the head. Again, when all these symptoms are so speedily changed on reducing the cataleptiform condition of the limbs, how can it be doubted that the rigidity of the limbs, and consequent obstruction to free circulation through them, is the chief cause of the determination to the head and other parts not directly pressed on by rigid muscles ? *

* In reference to the cataleptiform condition, I beg leave to offer the following remarks *merely by way of conjecture*, and with the hope that they may excite others to direct their attention to the investigation.

Muscular contraction or motion is voluntary or involuntary. The voluntary arises from a mandate of the mind, proceeding from the brain, and effecting contraction or shortening of the muscular fibres ; the involuntary, or reflex, from irritation conveyed to the spinal cord, producing a like result, and may be excited by tickling, pricking, or pinching the skin of the extremities of a decapitated or pithed animal. It appears to

In conclusion, I beg leave to remark, that the varieties which are met with as regards susceptibility to the hypnotic impression, and the mode and degrees of its action, are only analogous to what we experience in respect to the effects of wine, spirits, opium, the nitrous oxide, and many other agents.

me, however, that much of the efficiency and tendency to muscular contraction is dependent on another cause, namely, the state of *tone* or *tension* of the muscles when considered to be in a state of quiescence ; and this state of tone I consider depends on the ganglionic or organic system of nerves. Supposing, from deficiency of this, the muscular system is relaxed, a morbid tendency to reflex action will be induced, as a musical string will be more easily excited to vibrate if *moderately* tight, than if drawn *very tense*. It will also render muscular effort less efficient and certain, because part of the muscular contraction, which would have been efficient as available force or motion, will be expended in bringing up the muscular structure to that state which ought to have been its *normal condition* of tension or tone.

On the other hand, supposing the organic system has been extremely active, and rendered the muscular tone *abnormally great*, it will produce the very reverse effect of that just referred to. It will not only offer resistance to reflex motion, but also to *voluntary* motion ; and, if carried to a certain extent, may render the parts fixed and rigid, from the ganglionic system overpowering the cerebro-spinal system.

That this is not mere hypothesis seems to me to be in some degree proved, by the result of operations referred to in my paper in the Edinburgh Medical and Surgical Journal for October, 1841, where muscles which had been rigidly contracted, and had lost all power of motion, had motion restored

They are all well known to act differently on different individuals, and even on the same individuals at different times, according to the condition of the

by dividing the tendons, and allowing a new portion to grow between the divided ends, thus elongating the muscles ; and, in other cases, where there was paralysis *from relaxation*, power was regained by *cutting out a portion of tendon*, bringing the divided ends together, and ensuring their adhesion, and thereby shortening the muscles, and giving them *artificially* that tone or tension, the want of which I considered was the great cause of the continuance of the paralysis. It therefore appears to me, that during the hypnotic state there is a complete inversion of the ordinary condition, and that the force of the ganglionic system becomes predominant, instead of being, as in the ordinary condition, only subordinate.

Another argument in favour of this view is the well known fact, that all voluntary motion, or reflex muscular action, speedily exhausts the powers, and renders the subject unable to continue such efforts, and fatigued in consequence of them. Voluntary effort also is *strongest at first*, and gradually becomes weaker. The functions of the organic system of nerves, on the contrary, are more equable and persistent in their nature ; and, although they may be influenced in some degree as to the activity of their functions, by directing attention in a particular manner, — as the secretion of saliva by thinking of food, the secretion of milk by the nurse thinking of her child, &c. &c., still they cannot be said to be under voluntary control in the same direct manner and degree as muscular motion. The cataleptiform state induced by Hypnotism comes on gradually. For some time voluntary power predominates ; but at length the involuntary rigidity, or organic tonicity gains the ascendency ; and, although persisted in for a great length of time, is followed by no exhaus-

system ; but who calls in question the reality of their effects merely because of that want of uniformity of action ?

tion or fatigue. On the contrary, so far as I have carried the experiments, the whole functions seem to be invigorated by the continuance of this condition.

PART II.

CHAPTER I.

Modes of operating — Objects of operations — Cases of sight improved — Hearing — Deaf and dumb — Mr Curtis's remarks — James Shelmerdine's case — Mr Bingham's testimony — S. Taylor — Sense of smell — Touch and resistance — Tic, paralysis of sense and motion, cured — Miss E. Atkinson's case, voice recovered — Rheumatism, ten cases — Irregular muscular action — Headache — Spinal Irritation — Epilepsy — Spinal curvature — Neuralgia, and palpitation of the heart — Surgical operations without pain — Diseases of the skin — Locked jaw — Tonic spasm — Miss Collins — Concluding remarks.

Having in the former part so far explained the mode of inducing the phenomena, I now proceed to detail the cases in which I have successfully applied this process in the cure of disease. I shall endeavour to explain my modes of operating in different affections, so as to enable others to apply with advantage in their practice, what I have found so eminently useful in my own.

When the artificial state of somnolence has been induced in the manner already pointed out, pp. 27—29, the manipulations must be varied according to the peculiar object we have in view. If the *force* of the circulation in a limb is wished to be diminished, and the *sensibility* also to be *reduced*, call the muscles of that member into activity, leaving the other extremities limber. On the other hand, if the force of the circulation and sensibility are wished to be *increased* in a limb, keep *it* limber, and call the *others* into activity, by elevating and extending them, and the desired result will follow. If *general depression* is wanted, after one or two limbs have been extended for a short time, cautiously reduce them, and leave the whole body limber and quiet. If *general excitement* of the system is wanted, extend the *whole* limbs, causing the patient to call the muscles into strong action, and very speedily they will become rigidly fixed, and the force and frequency of the heart's action, and determination to the brain, as evinced by the action of the carotids, distended jugulars, flushed face, and injected eyes, will speedily become apparent. By applying the ear over the region of the heart, it will be apparent that the force and frequency of the heart's action becomes prodigiously increased in a very short time after extending the limbs. It will also be found, they may be very speedily altered and brought down by reducing the rigidity of the limbs. The difference of rise in the pulse when extending the limbs *during hypnotism*, from what happens in the natural state, is one of the strongest proofs of the patient being in the hypnotic condition.

It has appeared to me, that we have thus the power

of subjecting the brain and spinal cord, and whole ganglionic system, to a high state of excitement, as the pulse may speedily be raised to double its natural velocity, in most cases, and still more speedily reduced to the natural standard again. Its volume and tension may also be equally rapidly increased or diminished. It is therefore naturally to be expected, that the functions must be greatly influenced by such transitions. Every medical man knows that chronic nervous disorders of the most painful nature may have resisted every known remedy for weeks, or months, or years, but have speedily vanished on the accession of some acute attack. Now, my views were, in such cases, to induce an *intense* state of excitement for *a short time*, to be terminated abruptly, with the hope of changing the former action, and thus terminating the disorder ; and assuredly, in many instances the most obstinate chronic functional disorder is gone, or greatly meliorated, by a few such operations.

Then, again, by keeping any particular organ awake or active, whilst the others were asleep, I considered there would be a great increase of activity induced, by the whole nervous energy, or sensorial power, being directed to that point ; or by keeping all the other organs active, whilst one which had been *too* active was allowed to remain in the torpid state, that inordinate activity would be reduced in intensity, and that probably permanently,—that the inordinate stimulus, in one case, would remove the susceptibility to lower impressions, which were frequently exciting, or habitually keeping up morbid feeling or action ; and in the other cases, that by suspending the morbid sensibility of a part for a time, and rousing antagonist

functions, such condition might be permanently improved.

Whether I have been right or wrong in my theoretical views, there can be no doubt of the fact that in many instances I have been successful in the application of Hypnotism as a curative agent; and the beneficial results of the operations have been so immediate and decided, as to leave no doubt that they stand in the relation of cause and effect. However, that much of the success depends on the impression arising from the altered condition of circulation, seems to me to be proved by the fact, that in cases where the sleep was induced *without* the *rise* in *the force and frequency in the heart's action*, by insuring this condition, the beneficial result has instantly followed, where there has been no previous improvement with the *low* pulse. The following is a remarkable instance of this: — Nodan, deaf mute, twenty-four years of age, was considered never to have heard sound excepting the report of a gun or thunder, when there was succussion of the air sufficient to induce *feeling* rather than hearing, properly so called. The mother told me Mr Vaughan, head master of the Deaf and Dumb Institution when Nodan was at school, considered any indication of hearing referred to was *feeling*, and not hearing, properly so called. At the first operation there was very little rise of pulse, and afterwards I could not discern he had any sense of hearing whatever. At next trial the pulse was excited, and so remarkable was the effect, that in going home he was so much annoyed with the noise of the carts and carriages, that he would not allow himself to be operated on again for some time. He

has only been operated on a few times, and the result is, that although he lives in a back street, he can now hear a band of music coming along the *front* street, and will run out to meet it.

I shall first illustrate the efficacy of hypnotism on the various senses, and also on the mental condition. And first, of sight. The mode of operating in chronic cases, is first to induce the sleep, then extend the extremities, and keep the eyes from getting into the torpid state, by fanning them, or passing a current of air over them occasionally. The length of time required to keep such patient in this condition may vary from six to twelve minutes, according to the state of the circulation. The following cases will illustrate the affections of the eyes in which I have applied this mode of treatment with advantage.

Case I. Mrs Roiley applied to me on the 6th April, 1842. She stated she was 54 years of age; that for the last sixteen years she had been a great sufferer from an affection of the head, attended with pain in the eyes and weakness of sight; that it was now become so bad, that she could not continue to read for more than a few minutes at a time, even with the aid of glasses. She had undergone the most active treatment under first rate medical men, including bleeding general and local, blistering — on one occasion, she was twice bled with leeches, and had five blisters to her head in one month — and almost every variety of internal medicine which could be suggested for such a case; but still without improving her sight. For years she had required to have her head shaved every few weeks, and cold affusions and spirituous lotions frequently applied to it, to reduce

the excessive heat and other uncomfortable feelings. The skin of the palms of the hands was so hard, dry, and irritable, as to render it liable to chap whenever she attempted to open the hands fully. The pain during the day, and general irritability, had rendered it necessary for her to take a composing pill three times in twenty-four hours, for some time; still her rest was so bad as to force her to rise and walk about the room several times during the night; and her memory had become so much impaired, that she often required to go up stairs and then down again several times before she could remember what she went up for. About three years before consulting me, she had a paralytic attack, which deprived her of power of the muscles of the right side of the face for a few days. Such had been the general state of her health before consulting me, and the state of her *sight*, and the result of my operation will be understood by the following document, which is attested by herself and others, who were present when I first operated on her: —

"Mrs Roiley, (aged 54,) Chapel Street, Salford, formerly of South Windsor Street, Toxteth Park, Liverpool, as Miss Robinson, (four years ago,) has been gradually losing sight since thirty-eight years of age. Called on me for the first time, 6th April, 1842. Could not read the heading of the newspaper, excepting the words, 'Macclesfield Courier;' after being hypnotized for eight minutes, she could distinctly read 'and Herald,' and in a few minutes more the whole of the smaller line, 'Congleton Gazette, Stockport Express, and Cheshire Advertiser,' also the day, month, and date of the paper. That the

above is a correct report, is attested by the patient herself and other three patients, who were present the whole time. (Signed) ALICE ROILEY.
M. A. STOWIE.
ANN STOWIE.
HENRY GAGGS."

When Mrs Roiley called on me two days after, she gave me the following report. After leaving my house on the 6th, she was much gratified to find her sight so much improved, which induced her to go and test it by looking at articles displayed in shop windows, and in particular remarked that she had walked up to Mr Agnew's shop window, and was able to see distinctly the features of a portrait of Sir Robert Peel, and to read under it, "Sir Robert Peel, Bart.," *without* her glasses, neither of which she could have done for long before. She also stated, that after being at home, she took up the small diamond Polyglot Bible, and with the aid of her glasses, was agreeably surprised to find she was enabled to read the 118th Psalm, (29 verses,) although this had been, as she expressed it, a sealed book to her for years. The following is the report which was recorded and attested by her on the 12th April, 1842: — "Mrs Roiley was able to read a Psalm with the aid of her glasses in the smallest sized Polyglot Bible same afternoon she was first hypnotized. Two days after, (8th April,) was hypnotized a second time. Next day, made a net handkerchief with the aid of her glasses. April 12, has gone on improving, and in my own presence and several others, with the aid of her glasses, read the Polyglot Bible with ease and correctness, which she

said, had been a sealed book to her for years before I operated on her.

(Signed) Alice Roiley.
M. A. Stowie.
Wm. Halliday."

It is gratifying to be able to add, that the improvement of the sight has been permanent; and not only so, but that the whole painful catalogue of complaints with which she had been afflicted speedily disappeared, namely, pain of the chest, head, and eyes, loss of memory, disturbed sleep, irregularity of the secreting and digestive functions, and instead of the arid skin, regular action of it, so that the palms of the hands, which were so harsh and arid that she could not extend them without lacerating the skin, causing great pain and annoyance, were very soon as soft as a piece of chamois leather.* The whole of this improvement was accomplished entirely by this agency, as she had no medicine whatever during her attendance on me; nor has she required any up to this date, 20th February, 1843, when I read this report to her, and when she remarked it was much *under* drawn; that with great truth I might have represented her as having been a greater sufferer.

Mrs Roiley is a very intelligent person, and one whose Christian profession and principles place her

* Very lately, a lady about 25 years of age was hypnotized by me. On being roused, she expressed her surprise to find her hands bathed in perspiration, as she observed *she was never known to have the slightest moisture on her hands till that moment.*

statements above all suspicion. She has been seen by many eminent professional and scientific gentlemen, who can bear testimony that they have had from her own lips the same statements as I have recorded above.

It appears to me that it would be impossible to adduce a more striking proof than this case affords, of the great and undoubted benefit resulting from the application of any remedial measure. The improvement was so remarkable, as to admit of no doubt as to its reality, and so immediate after the hypnotizing, as to prove they stood in the relation of cause and effect, no other remedy being in operation ; and whatever may be supposed capable of being achieved through the mere power of imagination, as regards *certain* functions, the sense of *sight* could scarcely be supposed capable of being so much meliorated directly through that influence.

Case II. is that of Mrs M. A. Stowe. This lady was present when I first operated on Mrs Roiley, and was so much gratified by the effects she witnessed in that case, as to induce her to consult me as to the state of her own eyes, and the probability of benefiting them by a similar operation. Mrs Stowe was 44 years of age, and had experienced such weakness of sight as to require the aid of glasses for the last twenty-two years, to enable her to sew, read, or write, and, for some years past, she required them to enable her to transact her most ordinary household duties. The following is the statement of her condition, which I noted at the time, and is attested by her own signature, and that of others then present :—

Mrs Stowe, aged 44, 1, Bank Place, Red Bank,

Manchester, has been troubled with weakness of sight for twenty-two years, so as to require glasses to enable her to read or sew. When tested to-day, 8th April, 1842, without her glasses, could not distinguish the large (capital) letters of advertisements in a newspaper, nor large heading of the paper. After being hypnotized for eight minutes, she could distinctly read both the large and small heading, and day, month, and date of the paper.

(Signed) M. A. Stowe.

She has also been able to sign her name to attest the accuracy of the above statement, before her daughter, and another patient.

(Signed) Ann Stowe.

10th, Called on me, and informed me she had been able to make herself a blonde cap, and to thread her needle *without* spectacles,* which she could not do before for twenty-two years. 12th, Continued improving; told me she had been able to write up her accounts *without* glasses.

(Signed) Stowe.
Wm. Halliday.
Alice Roiley.
Ann Stowe.

This patient has retained the improvement of her sight. She has also informed me, that she was agreeably surprised, after she left my house, the *first*

* I have myself seen her thread a No. 8 needle on several occasions.

day she was operated on, to find, as she went along the streets, that she could read the *sign-boards*, which she could not do for years before. She has also named to many others, as well as myself, a very convincing proof of her great improvement in this respect. Before being operated on by me, on the 8th April, 1842, if she went a-shopping, *without her glasses*, she was sure to make some mistake as to the quality of goods purchased, and have the trouble of going back to have them exchanged, but now she never requires to take her glasses with her, as can be testified by the shopmen where she makes her purchases. Her memory and general health have also been greatly improved by the same operations.

Case III. Miss Stowe, daughter of the former patient, 22 years of age, "was under the necessity of reading, and doing any particular work, with the aid of glasses, for the last two years, but has never required them since she was first hypnotized, and can now read the small Polyglot Bible." This is attested by her mother, herself, and Mr William Halliday, and Mrs Roiley.

The improvement has been permanent, and she has threaded a No. 12 needle in my presence, eight months after I first operated on her.

Case IV. Mr J. A. Walker, 22 years of age, had always had very weak sight, but since being hypnotized has been greatly improved in his sight, as well as in his memory and general health.

Case V. Mrs C., aged 83, had, from her age, required the use of glasses for many years, to enable her to sew or read. Last August I hypnotized her for deaf-

ness, with very decided advantage, and I told her I also expected to improve her sight at the same time. She was very incredulous, but was agreeably surprised to find, that after a *second* operation she was not only able to *hear* much better, but also to sew some flannel, threading her needle *without* her glasses. She had been thus occupied for several hours, when I called to see her, after the *second* operation.

There have been cases in which I have tried this method without success, but this proves only that we must never expect to obtain possession of a universal remedy. Cases of confirmed amaurosis, which had resisted every other known remedy, and which were only undertaken by me at the desire of the patients, and sometimes of medical men also, as a forlorn hope, have, as in most cases was suspected might be the result, proved unsuccessful, and, through these, attempts have been most ungenerously and unwarrantably made to throw discredit on the power of hypnotism altogether. It has proved successful in too many instances, however, to be borne down by such paltry and pitiful misrepresentation. I could easily adduce many more successful cases, did I deem it necessary, but shall only give two more.

Case V. Mr J—— has always had imperfect vision, is near-sighted, has strabismus of right eye, and the sight so dull, that it was with great difficulty he could, without glasses, see the large letters (on white paper) in the title page of the "Medical Gazette." After the first operation he could see better, and after it had been repeated a few times he could, without glasses, read a few words of the

leading article of that work, and after a few more operations, could read the type in which the lectures, at the beginning of the work, are printed.

Case VI. Mrs S., one of my own near relatives, had a severe rheumatic fever in January, 1839. During the course of this disease the left eye became implicated, involving both the internal and external structures of the organ. She had the benefit of the advice of one of the first-rate oculists in Edinburgh. She was under his care till the August following, when he considered farther attendance unnecessary, but gave such instructions as he deemed expedient for her future management of it, and which had been duly attended to till the period when I first saw her, in June, 1842. At that time she came on a visit to my house. The eye was free from pain, but was of no service as an organ of vision. There was an opacity over more than one half of the cornea, sufficient to prevent distinct perception of any object placed opposite the temporal half of the eye, all being seen through a dense haze; and objects placed towards the opposite side were seen very imperfectly, owing to the injury the choroid and retina had sustained in the points on which the images of such objects were reflected. The opacity of the cornea was not only an obstacle to distinct vision, but was also a source of annoyance, from its disfigurement, being obvious even to those at a considerable distance.

Notwithstanding the great advantage I had seen other patients, afflicted with affection of the eyes, derive from hypnotism, it never occurred to me that such a case as that of Mrs S. was likely to be benefited by such an operation. I had, however, recommended

it to her for a severe rheumatic affection of the right shoulder and arm. She had been in my house about three months before she could make up her mind to undergo the operation, but at length, the violence of the pain impelled her to try it, or any thing else I should recommend. I of course hypnotized her, which immediately relieved her pain so much, that after the first operation, she could move the arm freely. The operation was repeated the following day, with complete relief as regarded the arm; and to the surprise and delight of the patient, myself, and others present, she found her *sight* so much improved as to be able to see every thing in the room, and to name different flowers, and distinguish their colours, whilst the right eye was shut, which she had not been able to do for more than three years and a half previously. I consequently now repeated the operation daily, and, in a very short time, had the satisfaction of seeing the cornea so transparent, that it requires close inspection to observe where any opacity remains. Neither external nor internal means were used during this improvement, nothing but the hypnotizing was had recourse to; and during the three months I had an opportunity of watching it prior to these operations, there was no visible change in the condition of the organ. I should observe, that after the first operation, there was considerable smarting in the eye, which continued all night, and, in a less degree, after future operations, which, no doubt, roused the absorbents, and effected the removal of the opacity of the cornea. Stimulating the optic nerve to greater activity, however, must have been the chief cause of the very rapid improvement, which enabled her to see

objects after second operation. I should remark, that the sight, with regard to objects seen from the *temporal* side of the eye, is much more distinct than from the nasal side, owing to the retina and choroid having sustained irreparable damage during the inflammatory stage at the commencement of the attack in 1839.

Case VII. Mr Holditch, 39 years of age, had been partially paralytic for ten years, which came on some time after a fall. Shortly after the fall, he experienced an attack of double vision, which went off after bleeding, blistering, and the usual treatment, but was followed by paralysis of the lower limbs, which induced him to consult me on the 18th of February, 1843. See Case XXVII. p. 217. He was very much surprised, when I told him he had defective vision of the right eye, said he was not aware of it, *and would not believe that I was not mistaken, till I tested him*, when he found he could barely see the capitals of the words, "Medical Gazette," as heading of the leading article of that work, whilst he could read the ordinary size print of the page with the other eye. After being hypnotized, I tested him in the same position, and with the same degree of light, and he could then read the *small sized print with it*, and it has continued so ever since. He could also walk across the room without crutch or stick, which he could not do before, at which he was very much surprised, as he was quite conscious the whole time, and therefore could not believe any good could have resulted to him from what was done, till he had the positive evidence of it in being able to see and walk.

Here, then, we have seen three cases of improved

vision consequent on hypnotizing for other affections, and where, consequently, the improvement could not at all be attributable to imagination, but to the altered condition in the capillary circulation and distribution of the *vis nervosa*.

In cases of active inflammation of the eyes, either external or internal, I have never tried hypnotism. By the mode calculated to excite the circulation, of course it would be quite inadmissible; and it could only be speculation for me to hazard an opinion as to its probable result by the other mode.

The extraordinary excitement of the auditory organ, which I had observed in the course of my early experiments, and the fact that hearing was the last sense to disappear during this artificial sleep, (unless we except that of the sensibility to a current of air,) led me to anticipate most satisfactory results from this process in the treatment of deafness, arising from torpor of the auditory nerves. I consequently tried it in such cases, and where there has not been destruction, or irreparable organic injury to the auditory apparatus, I can confidently say, I know of no means equal to hypnotism, for benefiting such cases. Of course, it cannot suit *all* cases, but I am satisfied it will succeed in a numerous class of cases, and in some which bid defiance to all other known modes of treatment.

I am enabled to state this confidently, not only from my own personal success, but also from that of others who have fairly tried it. One professional friend, Mr Gardom, introduced to me two patients whom he had improved so much by hypnotism only, that they were enabled to hear the sermons of their

respective pastors, which they could not do before, in consequence of which one of them had to leave her favourite minister, and go to another church; but, after being hypnotized, has been able to hear so much better, that she has been thus induced to return to her *former* pastor.

The great success which I had experienced from hypnotism, in improving those who were deaf through disease, led me to hope it might be of service to some of those who were born deaf and dumb, and I therefore tried it in such cases with a considerable degree of success, ultimately with a success beyond my most sanguine expectations. In consequence of what had been done and exhibited at my lectures, the medical profession of Liverpool, to their credit be it recorded, recommended to the governors of the Deaf and Dumb Institution there, to permit an experimental trial to be made at their Institution. The governors refused their assent to this *within the walls of the Institution*, but agreed to permit a trial to be made with such out-door pupils as could be induced to submit to it elsewhere, the consent of the parents having been obtained. In consequence of this, a committee of the governors and the medical faculty was appointed to superintend the said investigation, and I was invited to go over and conduct the experiments in their presence, and it was proposed a report of the results should be published in the Medical Journals, at the termination of our labours. The difficulty of getting the pupils and their parents to attend, induced us to abandon the proceedings after two trials had been made, so that it would be quite inconsistent with the conditions stipulated, at the commencement of said investigation, to

publish any report of the result of this *partial* investigation. However, I think I cannot better illustrate the extent of my expectations, in reference to such cases, than by transcribing an extract from my address to the said committee, prior to commencing our experimental trial.

"Hitherto, these patients have been considered beyond the pale of human aid, so decidedly have they resisted all means tried for their relief; and the morbid condition of the organs, as ascertained by dissection, was sufficient to warrant the inference that it was *improbable* any remedy could ever be discovered for such cases. Fully aware of this pathological difficulty, I was nevertheless inclined to try the effect of neuro-hypnotism with congenital deaf mutes, knowing it could be done with perfect safety, and without pain or inconvenience to the patients. Moreover, from having witnessed its extraordinary power of rousing the excitability of the auditory nerves, I entertained the hope that it might thus be capable of exciting *some* degree of hearing, from the increased sensibility of the nerves compensating for the imperfection of the organ. I was not, and am not even now, so visionary, as to expect *perfection of function*, when there is great *im*perfection of the organ. Perfection of organization and function must be co-existent; at least the function cannot be *perfectly* performed when the organization is *much* impaired. The result of my first trial was beyond my most sanguine expectations, which induced me to persevere, and the result has been, that I have scarcely met with a case of congenital deaf mute, where I have not succeeded in making the patient hear in some degree. Many may

never hear so well as to make it available to holding conversation by its aid ; but still it is most interesting in a physiological point of view, to know the fact, that by this means the imperfect organ can be roused to *any* degree of sensibility to sound, as even this must tend to the improvement of the general functions of the brain, rather than being *entirely* deprived of one source of its appropriate stimuli. I have no doubt, moreover, that many cases will, by this means, be restored to such degree of hearing as will be available for colloquial intercourse in society, which never could have been accomplished by any other means hitherto tried. If my success with the cases assembled here is at all equal to what it has been with others elsewhere, I think it cannot be otherwise than gratifying to you to find that our art has acquired a new and important power in this agency. I must not, however, omit to add, that many cases may shew no improvement at a *first* or *second trial*, and yet be very satisfactory after a few trials. According to my experience, there is much greater chance of benefiting *congenital* deaf mutes, than those who have become so from disease or accident, to *the extent* of *total loss of hearing*.

"In testing patients as to their power of hearing, I consider it quite necessary to adopt a different plan for those who are *congenital* deaf mutes, from what we do with those who have known what perfect hearing was at some former period of their lives. It is quite true that the latter class may be unable to hear a musical box, or the tick of a watch, when held at a little distance from the ears, but can hear it when pressed *against* the ear, or the mastoid process, or

against the teeth, owing to the greater conducting power of the bony structure. There are patients of this class, however, who declare they have no sense of sound when so tested, because their previous knowledge of the sense enables them to distinguish betwixt *hearing, properly* so called, and *common feeling.* In testing *congenital* deaf mutes, from their want of this previous knowledge, they will all signify they hear, if any sonorous or vibrating body is pressed against the ear. This, however, I do not consider we have any proof of being *hearing*, but *feeling;* because they had no previous knowledge to direct them as to the peculiar sensation of *correct hearing;* and they will give the same indication if the sonorous body is placed on any other solid part of the body, according to its respective degree of sensibility. In applying tests to *congenital* deaf mutes, therefore, I consider they have no sense of hearing, if they cannot hear the sound of a musical box *held close to*, but *not touching* the ears, or any other sonorous body whose vibrations do not excite such oscillation in the air as is sufficient to be recognized by *common feeling.* It ought also to be borne in mind that the *common* feeling of the deaf and blind is generally much more acute than in those who have not been deprived of those senses. At all events we cannot err in taking this as our standard, because, if those who did not hear on the application of such a test *before* the operation, do not hear it also *after* the operation, we shall consider there is no improvement; and if those who hear it at a certain distance *before* the operation, cannot *after* the operation hear it at a *greater* distance, it must also be considered no improvement has been made. But if

the former can, *after* the operation, hear *without the box touching* the ear, and the latter can hear *at a greater* distance, then of course we are entitled to say an improvement has resulted from the operation."

These extracts should be sufficient to explain what the extent of my expectations were as to meliorating the condition of *congenital* deaf and dumb patients, the principles upon which these expectations were based, and my mode of testing the original and subsequent condition of such patients. The following cases will prove that my anticipations have been so far realized—in one case to an extent I never calculated on. The mode of operating is, hypnotize the patient, extend the limbs, and gently fan the ears.

Case VIII. The case of Nodan has already been referred to at page 164, and I shall therefore merely add here, that he was 24 years old, was never considered to have had the power of hearing, properly so called, according to the opinion of the head master of the Deaf and Dumb Institution, where he was a pupil; that *after* the *first* operation I satisfied myself *he had no sense of hearing*, but after the second, which I carried still farther, he *could* hear, and was so annoyed by the noise of the carts and carriages when going home, after that operation, that he could not be induced to call on me again for some time. He has been operated on only a few times, and has been so much improved, that although he lives in a back street, he can now hear a band of music coming along the front street, and will go out to meet it. I lately tested him, and found he could hear in his room on the second floor a gentle knock on the bottom stair. His improvement, therefore, has been both decided and permanent, and is entirely attri-

butable to hypnotism, as no other means were adopted in his case.

Case IX. "Mr John Wright, Pendleton, 19 years of age. Congenital deaf mute. Was four years at the asylum under Mr Vaughan. Never heard sound. On testing, could not discern the tick of a watch pressed against the ears, nor a musical box, *unless when pressed against the ears*, which was evidently *feeling, and not hearing*, as he evinced the same expressions when it was applied to the shoulder, chest, or back of the hand. After being hypnotized for eight minutes, he could hear the musical box held *more than an inch from* the *left* ear, but not at all with the *right*, if not pressed against it, which was of course only feeling. Certified as correct by the father of the patient. (Signed) JOHN WRIGHT."

"MANCHESTER, 8*th April*, 1842."

"After writing the above statement, he was again tested, and could hear the box *half an inch from the right* ear. (Signed) JOHN WRIGHT."

The latter fact, of hearing better after being roused than at the very moment they are roused, occurs in cases generally. This patient attended daily for a short time, and made considerable progress in the power of hearing, but like too many others he had not patience to persevere, which his father, who is a very respectable and intelligent man, wished him to do. Unfortunately the deaf and dumb are not aware of the *extent of their privation*, or of the real advantage they would obtain by persevering, and their expectation, and that of their friends, in most cases seems to be, that the moment they have the power of *hearing* restored in some

degree, they should, as by a miracle, also be immediately inspired with the gift of tongues, and be able to speak and understand language without study, toil, or trouble. This has been so well expressed by John Harrison Curtis, Esq. that I shall quote a paragraph from his pen on the subject.

"Kramer condemns the cases recorded as cures by Itard, Deleau, and others, because, when published, the patients had not acquired a facility of speech equal to that evinced by other people of the same age; forgetting, that when the deafness has been cured, the individual is placed precisely in the position of a child that has to acquire the faculty of speech, and not unfrequently the power of thought; while, at the same time, if he have approached the age of puberty, he has to contend with false impressions created by the erroneous perceptions which affected him while unable, from his infirmity, to impart his feelings and ideas to his fellow-creatures; in fact, he is placed in the same position in regard to hearing as Cheselden's patient was with respect to vision. The organ, when the cophosis is removed, requires to be carefully educated to perceive, understand, and distinguish the variety of sounds which will impinge upon the auditory nerve, a task requiring much time for its accomplishment. The cure of congenital deafness, consequently, may be effected, and yet rendered efféte, for want of this necessary subsequent education."

After remarking that many cases of deaf dumbness arise from disease, and are only partially deaf, he added, "Many of these cases admit of amelioration, some of cure; and I hold, that wherever there is a chance only of doing good, it ought not to be

neglected; it may certainly raise hopes which may be nullified hereafter, but not in the patient, who cannot comprehend the motives of the proceeding; nor would the friends be much annoyed thereat, if the surgeon has performed his duty properly, by shewing, that although there is a chance of success, it is after all only a chance." — "It does not occasion a loss of valuable time, worthy to be put in competition with the prospect of restoring even one individual to the enjoyment of the society and converse of his fellows." — "Many would be rendered (by proper treatment) useful members of society, who, under the present system, remain hopeless objects of commiseration as long as they live." Mr Curtis farther adds, "I perfectly agree with Dr Williams, who says, a cure ought always to be attempted, and that at the earliest moment at which deafness is detected; and children so affected should mix with others not deaf, and no symbolical education should take place until all chances of cure are gone." *Medical Gazette*, 23d September, 1842.

These remarks are so judicious and important as to require no comment by way of enforcing them on any intelligent and candid reader.

The following case having been the cause of much controversy, I shall give it in detail. Before operating on the boy, in the presence of the gentleman who brought him to me, I asked the lad, *in writing*, if he ever heard, to which he returned answer, (also in writing,) "No." I then proceeded to operate on him, and the following is a report of his case from my note-book.

Case X. "James Shelmerdine, Mr Barker's, 83 High

Street, Manchester, aged fourteen years and a half, was born deaf and dumb, and educated at the Manchester Deaf and Dumb Asylum, and came out last June, in consequence of his age. 4th January, 1842, I subjected him to the mesmeric influence, by causing him look at my glass rod, and in thirteen minutes aroused him by a clap of the hands, when he could hear the tick of my watch applied to the right ear, but only very slightly so when applied to the left. Could hear me speak loudly, but could not tell what I said to him. This took place in presence of his master, who brought him to me, and now attests the correctness of the above. The boy has other two brothers deaf and dumb.

(Signed) MATTHEW BARKER."*

5th January. Again subjected him to the operation. In twelve minutes he could hear my watch at nine inches from right ear, and at six from left.

7th January. Called upon me, and could hear with the right ear at four and a half inches, and one inch from left ear. After being hypnotized for ten minutes, he could hear the watch at seven inches from right, and at four inches from left ear.

17th January. After operation could hear six and a half inches with *left*, and seven and a half with *right*. 20th. Could, after being roused, hear my watch at seven and a half inches from *left* ear, and at nine inches from right."

The boy was now tested by competent judges, and

* Mr Barker was not the *boy's* master, but employed some of his friends, as was afterwards explained to me.

pronounced capable of imitating articulate sound *without seeing the motion of the lips.* To render this the more certain, he was tried with a word requiring *no* motion of the lips and spoken near his ear, which he distinctly imitated.

I now commenced to teach him to speak a few simple words, and he got on very well; and that he could do so very satisfactorily, I considered there was ample proof by what he accomplished at my lectures. There were some who could not believe he could have been born entirely deaf and dumb, when they heard how well he imitated articulate sounds when the motions of the lips were concealed. This was particularly and warmly disputed at a lecture I gave at Liverpool, on the 1st of April, 1842. The boy was asked, without my knowledge, by Mr Rhind, head master of the Deaf and Dumb Institution of Liverpool, if he ever heard before being operated on by me, to which he answered, "No." Next day, in the presence of several friends, I again questioned him in writing as to his original condition, when he gave the following answers, which he certified by his signature as being correct. Fortunately, this document, by the merest accident, (having been written on the back of a letter belonging to another gentleman,) has been preserved, and I shall here transcribe it *verbatim.* "'Could you ever hear before I operated on you?'—'No.' 'How did the master of the school teach you to say, papa, mamma?'—'Few days.' '*How* did he do it?'—'Ba, be, bi, bo, bu.' 'Did the master ask you to watch the motions of his lips?'—'Yes.' 'Did he try to teach you to speak by applying his mouth to your ear?'—'No.' 'Did you ever say what you

did to me before?'—'No.' 'Did you ever read it, so far as you remember?'—'No.'

(Signed) JAMES SHELMERDINE."

Hitherto the boy had only been taught single words. The last two questions refer to part of the "Lord's Prayer," in English, which I had been teaching him to speak by *means of hearing;* and although he speedily made a good attempt at repeating part of it, the effect was so different from that of the mode adopted at school, or that conveyed to his mind through the organ of sight, when reading it, as he must have been accustomed to do, *that he did not know what it was I had been teaching him to speak.* Could a stronger proof than this be adduced that the boy did not learn to speak by *hearing* before he was under my treatment?

I also, on the same day, taught this boy to repeat part of the Lord's Prayer in Latin, to do away with all ground of cavil as to what he *might* have learned at the Institution; and at my next lecture at Liverpool, the week after, he was heard to be able to repeat it when spoken to him in a moderate tone of voice, whilst the motions of the lips were concealed, and that taking the words in *any* order, so that there could be no ground of mistake as to his *hearing* what he repeated.

Various surmises having now got out, that this boy, James Shelmerdine, *might* have had, or *must* have had, the sense of hearing originally, and that his present condition could not possibly be the result of hypnotism, I addressed a letter to Mr Bingham, who was head master of the Asylum during the five

years this boy was at school, requesting him to favour me with information as to James Shelmerdine's *real* condition up to the time when he left school. The following is his reply, and I may add, I am not personally acquainted with Mr Bingham. After describing the partial hearing of this boy, which varied greatly, Mr Bingham adds, — "I never considered his hearing sufficient to distinguish one sound from another in conversation, and consequently, never attempted to teach him to speak in any other way than that which I use with all children born deaf. If hypnotism, or mesmerism, has enabled him to imitate the sounds you wished to communicate to him, without his observing the lips, I do not hesitate to say that you have achieved that which I never could have expected ; and, under such circumstances, I think every encouragement ought to be given to your plan. You would greatly oblige me by saying if this has been accomplished, as *the boy was quite incapable of distinguishing one word from another when he left me, if spoken behind his back.*"

Fortunately I had no difficulty in satisfactorily substantiating this, for, besides having been so repeatedly proved in the public lecture-room, here and elsewhere, he had also been tested before a number of the most distinguished members of the British Association, last June, and, more recently, before a dozen witnesses, including tho present head master of the Deaf and Dumb Institution of this town. I instituted this investigation in consequence of some gross attempts which had been made to misrepresent my conduct in reference to this case. The following is an extract from the report of his condition on the

25th July last, (1842,) and is attested by Mr A. Patterson, head master of our Deaf and Dumb School, and twelve more witnesses :—"James Shelmerdine was examined at Mr Braid's before the undersigned, in reference to his hearing, and he readily repeated part of the Lord's Prayer, both in English and Latin, both backwards and forwards, after Mr Braid repeating the words in a moderate tone of voice, without being able to see the movement of the lips."

I had not seen the boy for about a month before this investigation, and I would ask, did he not here manifest a decided improvement from the state he was in when he left school, when, as borne testimony to by Mr Bingham, "he was quite incapable of distinguishing one word from another," if spoken so that he could not see the motion of the lips? and I am quite certain this was his condition *immediately after my first operation.* As has been already stated, he could not then distinguish one word from another, however loudly spoken close to his ear.

After communicating these statements of what the boy *could* do, as recorded at the investigation on the 25th July, Mr Bingham favoured me with a second letter, from which I make the following extract :— "James Shelmerdine's performance in repeating the Lord's Prayer, in Latin and English, when the motions of the lips were concealed from him, is a convincing proof that he must have benefited greatly by it (hypnotism,) as he could not distinguish one sound from another by oral communication."

The following fact also proves the great improvement in the boy's hearing. One afternoon he was in my hall, when a lady was playing the piano, and

singing, in a room up stairs. He seemed so much pleased with the music that I gave him permission to go and hear it. He instantly went up stairs, and into the drawing-room, by himself, and seemed quite delighted with the sound of the music, as several who saw him can testify. This, I am quite certain, he could not have done for some time after he came under my care.

In fine, I feel confident, that had this boy persevered with the operation, and been taken pains with by his parents, to teach him to speak, and understand the meaning of what he spoke, he would, long ere now, have been able to hold oral communication with others with less trouble, and in a more moderate tone of voice than we must resort to with many whom we meet with, who have become hard of hearing from age or disease. It is, however, so much more trouble, at first, for the friends to teach them language, than to hold intercourse with them by signs, that they will not bestow it, and the patients, from not knowing the extent of their privation, can be less expected to exert themselves for acquiring the good they know not; and therefore, I feel assured there will never be much achieved for the *poor* in this way, unless within the walls of some public institution; but, that there are many who might be permanently benefited in such situations I have no doubt. In the paper by Mr Curtis, to which I have already referred, he writes thus in reference to the pathological condition of the organ in those born deaf and dumb: — "I am of the same opinion as Itard in this respect, that structural disease does not occasion more than one case in five, leaving, consequently, many cases in which medical

assistance may prove of service ; and I do not acknowledge that the ' weakness of the nerve, approaching to paralysis, or an actual paralysis of the nerve,' which Dr Kramer assumes to exist in those cases where congenital cophosis is present, and no structural derangement, must necessarily be as incurable as structural deficiency. We are not apt to abandon incipient palsy of a nerve of sense or motion, in other parts of the system, without an attempt at relief ; and I see no reason why the unfortunate being afflicted with deaf dumbness, should be surrendered to his fate, without a well directed attempt being previously made to redeem him therefrom."

This, together with the statement of his experience, ought to encourage farther trials, and especially now that we have got a new and more powerful agent to operate with than any hitherto brought into operation in such cases. The results of the following case have far more than realized my most sanguine expectations. It clearly proves, that persons with perfect organization may have been deaf and dumb from birth, and continue so merely for want of a sufficient stimulus to set the machinery in motion.

In consequence of the remarkable improvement of hearing, through hypnotism, evinced in the case of Mrs C., (Case IV. already recorded,) I was asked to give my opinion as to the probability of a similar operation benefiting a girl who had been deaf and dumb from birth, and who was sister to a servant in the family I was then visiting. I told them what my experience had been in respect to such cases, and it was accordingly arranged that I should see the

patient, and try what could be done for her, the following day.

Case X. 9th August, 1843. The girl, Sarah Taylor, was nine and a-half years of age, very small for her age, and very stupid looking. The following is the history of the case, as stated by father, mother, and elder sister. She was a seven months' child, remarkably small, the head large for the size of the body, and soft, ("like a bladder full of water,") and it was long before they expected to be able to rear the child. As she grew up they were much annoyed with her not speaking, and by her paying no attention to what was said to her. At last they found that this was not obstinacy, to which it had been at first attributed. They now came to the painful conviction that she was deaf and dumb. The father has assured myself, and many others, that in his anxiety to obtain proof of her having any degree of hearing, he has "often stood behind her, and shouted (as he expressed himself) till he was hoarse again," without her evincing any sign of hearing; and that when she was out of sight they were in continual terror she would be run over by carts or carriages, as she could not hear their approach. The testimony of the mother and sister was to the same effect, that they never could make her hear, or pay any attention by calling her, when her back was towards them. In such position they could only make her observe them by touching her. They all agree, also, in stating, that she never could speak so as to be understood, till after being operated on by me, excepting two or three words,—father, mother, sister, which she had learned from watching the motions of

their lips. I regret not having had her tested by a musical box before I operated on her ; but I am quite certain, that *after* the *first* operation she could not distinguish one word from another ; and I afterwards had the best possible proof of her never having heard for any useful purpose, as she was quite ignorant of the name of *any part of her own body, or of any person, place, or thing*, as is well known to many who saw her after I had operated on her. After the third and fourth operation I could manage to make her speak a few simple words, and also to make a tolerable attempt at following me when singing the musical scale.

Ten days after the fourth trial, she was tested and proved able to do this before fifty or sixty highly respectable witnesses, including many professional gentlemen. For months past she has been attending the Scotch Sessional School, and is making very good progress in learning, and I have no doubt, will prove to be a clever girl ; she hears so correctly now, as not only to be able to imitate speaking, but also singing. Mr E. Taylor, Gresham Professor of Music, lately afforded a number of my professional and scientific friends a good proof of this, as he composed an extemporary tune which she and other two patients sang correctly, whilst in the state of neuro-hypnotic sleep. She could have done the same whilst awake, and hundreds have witnessed her speak and sing, both when asleep and when awake.

It is curious, that in some who have a very incorrect musical ear, so that they could not be taught to sing the most simple air correctly when awake, can

nevertheless be made to do so, when in this peculiar sleep. This was remarkably exemplified in a young lady, whom I wished to be taught a simple air which she might sing by way of exemplification, at some lectures I was to give at a distance, but it could not be accomplished; she could not follow in tune more than a note or two together; but when asleep, she can sing any air correctly which I have tried her with. Still, when awake, she cannot do so. For an example of the same sort during natural somnambulism, see pages 296—298, and 309, of Dr Abercrombie's work on the Intellectual Powers. Of one it is noted, "She often sung, both sacred and common pieces, incomparably better, Dr Dyce affirms, than she could do in the waking state." Of the other, "she was, when awake, a dull awkward girl, very dull in receiving any kind of instruction, though much care was bestowed upon her, and, in point of intellect, she was much inferior to the other servants of the family. In particular, she shewed no kind of turn for music, and she did not appear to have any recollection of what passed during her sleep." During somnambulism, she sang beautifully, and exhibited great intellectual powers.

I shall conclude this department by recording the following case from my note book. The inability of this patient to sing *in tune* may have been partly owing to a defect in the organ of hearing, and partly to a state of nervousness affecting the vocal organs. The experiment was undertaken merely to gratify the particular desire of the patient, as at that time I had had no similar case, and was not prepared

to say, whether it was likely or not to be successful. However, I felt assured it would do him no harm, and made the trial accordingly, and assuredly nothing could have proved more successful or more gratifying than the result.

Case XI. 7th July, 1842, I was consulted by Alexander M'Roberts, 29 years of age, residing with Mr Hannay, of 42, Thomas Street, Manchester. He said, he had never been able to join in tune, although he had frequently attempted to do so. After being hypnotized for some time, (about ten minutes,) I roused him, and desired him to walk into the dining-room, and after hypnotizing him once more, a friend played the organ, and I directed (or led) him to sing the scale, beginning with D, as he could not sing C, owing to the natural pitch of his voice. He very soon managed to sing the scale quite correctly, upwards and then downwards. I now roused him, and made him sing it when awake, which he did remarkably well. I now tried him with the first part of "Robin Adair," which he followed in correct tune several times. This took place in presence of Mr James Reynolds, Mr Daniels, Mr James Braid, my nephew, and myself. In the evening of that day, after being again hypnotized, he sung the first part of "Robin Adair" very correctly several times, and also Pleyel's German Hymn, and the Old Hundred Psalm, quite correctly. Pleyel's German Hymn he never heard before. This took place in presence of four gentlemen.

His inability to sing prior to these operations was borne testimony to by several of his friends, one of

whom had a good knowledge of music, but despaired of ever seeing M'Roberts able to sing, and he was exceedingly surprised at the result. This patient was operated on several times afterwards, and when I last saw him, could sing a considerable number of tunes, and follow any simple air with ease and correctness.

The next sense I shall refer to is that of smell. Having put the patient into the hypnotic state, he ought to be kept in it a longer or shorter time, according to the object had in view. If to excite or quicken the sense, the limbs should be extended and a gentle current of air should be passed against the nostrils occasionally ; but if to diminish the sense, this ought not to be done.

Case XII. is an interesting example of restoration of the sense of smell by hypnotizing. A young lady was subjected to this operation for a different complaint. On being aroused, and after I left the room, she made inquiries as to the cause of the great noise she heard in the house, and expressed her surprise at the noisy manner in which the various duties of the apartment where she was were performed. They assured her there was nothing going on in the room where she was, different from what was usually the case, nor was there any thing to account for the noise she complained of, and they therefore held her complaints to be only imaginary. She persisted they were real. The fact was, she had been for a length of time dull of hearing, and the improvement of this sense consequent on the hypnotizing, had so quickened the faculty as to account for the difference

she experienced. Moreover, she had for a considerable time previously lost the sense of smell, and it was now ascertained *that this sense had also been restored, through the same operation.* Another patient who had lost the sense of smell for nine years, had it restored after being twice hypnotized. For a beautiful illustration of the extent to which this sense is roused during the hypnotic sleep, see foot note, * ex-

* "A beautifully contrived experiment was here put in practice by Mr Clarke, and Mr Townend, to test the truth of the phenomena. Mr Braid had drawn their attention to the wonderful exaltation of the sense of smell. A rose had been held before the patient, the scent of which she had followed about the platform in every direction with the most excessive eagerness — now standing on tiptoe to reach it when held aloft, anon bending herself forward with the most graceful ease, till her face came almost in contact with the floor — now darting after it across the platform (notwithstanding that her eyes were bandaged) with unerring aim as to the direction in which it was moved — or throwing herself into the most fantastic attitudes, but always with surprising ease, to catch its fragrance when moved merely round her person in tantalizing play. At length she no longer followed it, and Mr Braid now explained that the sense of smell had entirely gone, and could only be renewed by a current of air across the nostrils. Mr Clarke here motioned Mr Townend to go across the platform, which he did very softly, and Mr Clarke then threw the rose to him, a distance probably of from four to five yards. Mr Clarke having thus taken the precaution to guard against the suspicion of collusion or trick, himself passed a current of air across the nostrils of the patient, so as to again exalt the sensibility of the organ. She now moved forward as though in search of some object that had escaped her, and was advancing in front of the stage, which was not

tracted from a report of my conversazione to the members of the British Association, as recorded by the "Manchester Times."

The next senses I shall refer to, are touch and resistance; under which I shall adduce examples of the beneficial results of this agency, in the cure of abnormal exaltation or depression of these functions. There are few diseases more striking in their manifestations, or more important in their character and tendency, than those included in this class, namely, paralysis of sense or motion, or both; or the reverse, exalted feeling, and tonic or clonic spasm.

Tic dolourcux is well known to be one of the most agonizing affections to which the human frame is liable. It may arise from a functional disorder of the

exactly in the direction the rose was thrown, when suddenly her limbs and entire body shook with a tremulous motion, and she stooped slightly, and evinced the utmost terror. Mr Braid explained that this was occasioned by the rattling of a carriage over the pavement under the window partly, and partly by a feeling of insecurity, arising from the boards on which she stood being limber, and yielding considerably to the foot. When the noise of the carriage had ceased, she turned her face about till it pointed in the direction where Mr Townend stood, when, though he held the rose at a distance of three yards from her, she evidently caught the scent, and darted towards it with unerring precision, and appeared almost to revel with delight in its fragrance. A sudden burst of applause from the audience, quick as thought, dissipated the charm, and she stood aghast, apparently in an agony of terror. Mr —— laughed, and attempted to convey to a small circle around him the impression that all this was feigned, but the attempt was disregarded. In the very front of the company, and amongst those most narrowly

nervous system, of a local or more general character, or from an organic cause. The symptoms are much the samo in both varieties, but the chances of effecting a cure are very different. In the former variety, a cure may be effected, and by no means I know, so speedily and certainly as by hypnotism'; but in the latter, the chances of success are very different, either from this or any other known remedy. I have repeatedly applied it in the one case, without any apparent effect, either good or bad, but, in the other, with the most immediate and striking advantage. I give a few cases in illustration of this success in functional disorder.

Case XIII. W. M'Leod had been suffering for two months from a violent attack of tic of the head and

watching the experiments, were the Dean of Manchester, the Rev. C. D. Wray, the Rev. N. W. Gibson, the Rev. H. Ethelston, Colonel Wemyss, and a number of others whom we might mention, including several surgeons, who were capable of forming an opinion of their own, and we heard from several of them expressions at once of surprise at the phenomena, and of conviction that they were real. In fact, it was the conviction of comuon sense, since it would have been far more wonderful as a piece of trickery than as Mr Braid accounts for it. Every one must have felt that it was impossible for auy person in a natural state to follow a flower about the stage blindfolded, (supposiug the patient was awake,) passed about as it was from hand to hand backwards and forwards, with such ease, certainty, and rapidity ; but taking Mr Braid's solution of the difficulty, that the senses are unnaturally exalted, the mystery is at an end. The only thing extraordinary that then remains is, that such an agency should not before havo been discovered."

face, which had resisted the treatment prescribed by his surgeon. He had been taking carbonate of iron in ample quantity. After eleven minutes' hypnotism, he was aroused quite free from pain, and it never returned in the same degree of violence, and by a few repetitions of the same process, he was completely cured, and has remained well for about a year. The general state of his health required the aid of other means, but the violence of the tic was overcome before he took a single dose of medicine from me.

Case XIV. A young lady was suffering from a most violent attack of tic doloureux, so much so, that I heard her screams before entering the house. The paroxysms came on so frequently that she was roused before I could succeed in hypnotizing her at first trial. I now administered thirty drops of laudanum, in a little water, sprinkled some over the poultice on her face, and instantly commenced hypnotizing her again. In five minutes she seemed to be in a comfortable sleep, the features perfectly placid, the respiration calm, not a muscle seemed to move during the time I remained in the room, (which was a quarter of an hour,) whereas she had a violent paroxysm every three minutes previously, contorting her whole body, and when I examined her, after having been down stairs a considerable time, she was lying in exactly the same posture as when I left her, with the same appearance of placid sleep. When I called next morning I was told she had slept for five hours and a half, and had had no return of tic after awaking. As she was in the somnolent state, and the paroxysms of pain suspended *within five minutes*, it is quite clear this could not be due to the few drops of laudanum,

as they could not have been adequate to arrest such a violent complaint, at all events, *not in the course of five minutes.* *

Case XV. Miss —— had been suffering severely from tic for several weeks, and had several teeth ex-

* The following is the statement of the above case, attested by Mr Mullard, druggist, who had been called to visit this patient before my arrival, which I give because of some very unwarrantable interference by other medical men, — "I was present with Miss G. when Mr Braid visited her, in consequence of a violent pain in the face, coming on in severe paroxysms, as occur in tic douloureux. I had applied poultices, and had other means in readiness, but owing to the violence of the pain, Mr Braid, the usual medical attendant of the family, was sent for. Her screams were heard in my house, during the paroxysms, and they recurred about every minute, and lasted nearly a minute and a half, as nearly as I can recollect. Mr B. had an opportunity of hearing her on coming into the house; and shortly after being in her bedroom she had a second attack. Mr B. now tried to hypnotize her in his usual way, but she was roused by the violence of the pain. He now gave her a few drops in water, and sprinkled a few over the poultice, and applied it to the cheek again, and immediately repeated his operation, after which she seemed to be in a sound sleep, and gave no farther indication of pain in less than five minutes. Mr Braid, as well as myself, remained a considerable time, at least three quarters of an hour, and both left convinced she was comfortably asleep, and next morning I heard she had passed a good night, having slept about five and a half hours, and that the tic had not returned since we left. Every word of this has been carefully read and considered before being signed.

(Signed) A. T. MULLARD."

21*st June*, 1842.

tracted without relief. During a violent paroxysm, I succeeded in hypnotizing her, and when aroused, it was quite gone, and has never returned.

In the affection to which these cases belong, there is frequently such irritability of the skin, that a slight touch over the affected nerve is quite sufficient to excite a paroxysm of pain. I shall now adduce some cases illustrative of the *opposite* condition, when there was deficiency or entire loss of feeling; and which have nevertheless been greatly benefited, or entirely cured by hypnotism. The following case is illustrative of its successful application where there was paralysis both of sense and motion.

Case XVI. Mrs Slater, 33 years of age, in the autumn of 1841, had suffered a good deal during her pregnancy, and in December of that year was delivered of a seven months' child. From this period, her legs, which had been very weak for some time previously, became very much worse, and in a short time she lost all voluntary power over them, together with loss of natural feeling. She had been under the care of three professional gentlemen, but as she became worse instead of better, notwithstanding the means used, the case had been considered hopeless, and left to itself, for some time previous to my being consulted, which was on the 22d April, 1842. I found she had not only lost feeling and voluntary motion of her legs and feet, but that the knees were rigidly flexed, the heels drawn up, the toes flexed, and the feet incurvated, and fixed in the position of slight club foot (varus.) She had not menstruated since her confinement, but there was no other function as regarded the secretions or excretions, which appeared

to be at fault. Her speech was imperfect and her memory impaired. I hypnotized her, and endeavoured, whilst in that condition, to regulate the morbid action of the muscles, and malposition of the feet and legs. In five minutes I roused her, when she thanked God she *now felt she had feet, could feel the floor with them, and could move her toes.* I now raised her on her feet, and with the assistance of her husband supporting her by the one arm, and myself by the other, she went across the room and back again to the sofa, moving her legs and supporting half the weight of her body on them. I operated on her again the same evening, after which she was able to support herself standing with the soles of her feet on the floor. She required merely to be steadied by placing the points of the fingers of one of my hands against her back. Before being operated on, the heels were drawn up, and the feet twisted so that she could only have touched the floor with a small portion of the outer edge of the feet, near the root of the little toes. I hypnotized her in the same manner daily for some time with increasing improvement, so that in a week she was able to walk into her shop alone, merely requiring to steady herself by the wall, and in two weeks more she could walk into it *without any assistance whatever.* Two months from my first seeing her, she went to Liverpool, and was able to walk several miles in a day. She could walk from the middle of the town where she lodged, to the pier head and back, and from her lodgings to Everton and back, all in the same day, which was several miles partly on very steep acclivities. She had no relapse, and has continued well ever since.

In a very few days after I first operated on this patient, the catamenial discharge appeared for the first time since her confinement. She had no internal medicine, nor external application whatever to her legs for several days after I first saw her. Her extraordinary improvement, therefore, resulted entirely from the effects of the operations. After I had attended her some days, she required some simple aperient medicine, and I afterwards prescribed a diuretic, which I hoped might expedite the cure. The feeling and power of her legs and feet were greatly restored, her speech perfect, and her memory much improved, before she had a single dose of medicine from me. Her improvement therefore was strictly the result of hypnotism only.

The extraordinary effects manifested in this case, as well as in many others, after a few minutes' operation — so different from what is realized in the application of ordinary means — may appear startling to those unacquainted with the powers of hypnotism. On this account, I have been advised to conceal the facts, as many may consider it *impossible*, and reject the *less* startling, although *not more true* reports of its beneficial action in other cases. In recording cases, however, I consider it my duty to report *facts as I have found them*, and to make no compromise for the sake of accommodating them to the preconceived notions or prejudices of any one.

Case XVII. Samuel Evans, 45 years of age, had suffered much from pain in the spine, and also been afflicted with impaired feeling as well as power of the superior extremities for four years. He suffered also occasionally in the head, for which he had undergone

every variety of treatment usual in such cases, under many medical men, myself included, but with so little success that he had not been able to dress himself for five years: he could not lift the left arm, and natural feeling was almost entirely gone from it. The right arm was also affected, but in a less degree, when he applied to me on the 25th April, 1842. I hypnotized him, and he was so fully satisfied with the improvement he experienced, as to induce him to come to Manchester to be operated on daily. In a very short time his improvement, both as regarded strength and feeling, was most decided, as he could lift a heavy chair with the worst arm, and could feel a small object such as a pin, which could not have been distinguished by him with that hand when I first saw him. The pain in his back was also speedily much relieved. He was exhibited at my conversazione to the British Association, 29th June, 1842, in this improved state, and has made still farther progress since, although not yet able to follow his usual avocation. I should not omit to add, that this patient was under my own care for some time in 1841, when, although he derived benefit from the means used, he was not nearly so much or so rapidly relieved, as by my present mode of treatment by hypnotism.

Case XVIII. Mr —— 58 years of age, consulted me in consequence of a paralytic affection of two and a-half years' standing. Stated by his friends that he had had an apoplectic seizure two years and a-half before, which was at first accompanied with total loss of consciousness, and of sense and motion of the right side for six weeks. He then gradually

recovered, so as to be able to walk a little in the course of four or five months. When he called on me 3d June, 1842, his gait was very feeble and insecure, always advancing the right side foremost, his arm had always been supported in a sling, he could raise it with an effort as high as the breast, had not the power of opening the hand, the thumb was much and rigidly flexed. Had little or no feeling in that hand. After being hypnotized for five minutes, feeling was restored, he could open the hand and grasp much firmer, and *raise it to his forehead.* His speech, which had been very imperfect, was also much improved. This patient was operated on for some time with partial improvement, so that he could manage his arm without a sling, and the feeling continued improved, and there was also slight improvement in his gait, but I was of opinion, that there was organic mischief in the brain which would prevent a perfect restoration, and therefore discontinued farther trials.

Case XIX. Miss Sarah Mellor had been under my care for nine months, for an affection of the lower part of the spine, accompanied with pain and weakness of the lower limbs, and with contraction of the knees, so that she had been unable to stand or walk without crutches during that period. I had used every means usually adopted in such cases, but instead of improving, she was getting worse in every respect, till I tried hypnotism, the satisfactory results of which were too immediate and apparent to admit of the slightest doubt of its great value on this occasion. The following is a statement attested by the patient :—

" Had suffered severe pain in my ankles, with con-

traction of the knees, and pain at the bottom of my back, so that I had been unable to walk without a pair of crutches for nine months. During this period, I had taken medicines internally, used liniments to the legs and spine, been leeched and blistered over the lower part of the spine, but still, instead of improving, I was getting worse, both as regarded the pain and contraction, so that I was becoming quite deformed, from the legs being bent on the thighs, and they on the body. I was thus about nine or ten inches less in stature than formerly, and than I am now. About the beginning of last March (1842) I came to Mr Braid, who had prescribed the other means to me without benefit, when he said he would try his *new method* with me. After being hypnotized *three times*, I was able to walk from my lodgings to the house of a friend who lived a few houses distant in the same street WITHOUT MY CRUTCHES, and in two days after, from that house to Mr Braid's WITHOUT CRUTCHES. I was operated on almost daily for three weeks, when I returned home, and at that time I was able to walk *half a mile without crutches.* After being at home five weeks, I returned to Manchester, and have been attended by Mr Braid for two months, and always found myself better after the operations. I took no medicine during my first stay in Manchester; and on this occasion having only done so when required for a violent cold on two occasions, from imprudent exposure. Since I came to Manchester last, one day I walked to Grosvenor Street, Piccadilly, and back again to my lodgings in Lower Mosley Street, fully a mile and a half, without inconvenience; on another occasion to Hulme and back again, *fully two*

miles. I was quite sensible, and could hear all that was said or done during all the operations.

(Signed) SARAH ANN MELLOR.
JANE LIVESEY, Witness.
C. WILSON, Witness."

MANCHESTER, 12*th July*, 1842.

This patient was exhibited at my conversazione 29th June, 1842. After returning home, she had the misfortune to get entangled by one of the feet in a cart rut, in a lane, which threw her back, but having returned and been hypnotized, I was enabled to send her home much improved, and when she called on me lately, she continued so.

Case XX. Mrs J., 29 years of age, requested my attendance, 17th February, 1842. Had been attacked in the autumn of 1840, with slight degree of weakness of left side, and difficulty of speech, neither of which had ever been entirely removed. Three months after she was delivered of a still-born child, and had been affected with convulsions ten days prior to delivery, for which she seemed to have been treated in the usual manner. In about a month after delivery, 31st January, 1841, she had an apoplectic attack, attended with total loss of consciousness, and paralysis of the left side, for which her medical attendant had prescribed the usual treatment. I was called to attend her on the 17th February, and continued to do so for five weeks, when, as as there was no particular improvement manifested, she passed into other hands, and after being under treatment with them for ten weeks, without improving, she was sent into the country, where she remained for about

thirteen months, when she was brought back to town to be placed under my eare, 15th June, 1842. The following was her eondition at this period. Her mouth very much drawn to the right side ; her speech very imperfect ; and her mind confused. The left hand and arm were quite powerless, and rigidly fixed to the side, the hand clenched, the fingers and thumb being rigidly and permanently flexed. The left leg very rigid, the heel drawn up, and the foot twisted so that it could only approach the ground by resting on the outer edge near the root of the little toe ; she could move this leg a little, but had never been able to stand, or walk a step, or support any weight on it. I hypnotized her, though owing to her mind being so confused, I experienced considerable diffieulty in getting her to attend to the necessary instructions for produeing the condition. However, I at length succeeded, and after the first operation — I kept her in the hypnotic state for ten minutes — she could hold her mouth much straighter, eould move the fingers a little, and lift the hand and arm a few inches, and, with the assistanee of her mother-in-law and myself supporting her by the arms, she was able to support half the weight of her body in walking aeross the room and back again. Her speeeh was also improved, and she evinced less confusion of mind. Next day I found the improvement was permanent, and hypnotized her again with advantage. 17th, Found her improved, and still more so after being again operated on. She eould now, on merely steadying herself by laying hold of her mother-in-law's shoulder, stand supporting herself on the left leg, when the right foot was lifted

clear from the floor. Her speech was still more improved, and mind more collected, so that I had very little difficulty in hypnotizing her now.

She was operated on daily, with advantage, till the end of that month, and the results shewn to some of the most eminent professional and scientific gentlemen in this town. During the next two months she was operated on at times only, being so much better. In a few weeks she could walk to the door, steadying herself against the wall, and in a few weeks was able to walk into the street with the aid of a crutch. She had no medicine during this attendance. I only saw her occasionally now, and on the 17th September, when I had not seen her for nine days before, whilst taking her usual airing in the street, she was seized with apoplexy, from which she died within sixteen hours. On inspection, the whole of the superior and anterior lobes of the right side of the brain were found to be in a state of atrophy, only a thin layer, and that in a state of ramolissement, covering the ventricle, which was filled with serum, as was also the space between the pia mater and arachnoid, to make up the space vacated by the wasting of the cerebral substance. There was no effusion of blood. It is not at all surprising that such a case should have resisted former treatment, or proved fatal at last; but it seems surprising that, with such a state of brain, hypnotism should have had the power of producing so much improvement as it did.

Case XXI. 14th June, 1842, Mr Thomas Morris, 42 years of age, consulted me. He had had a paralytic stroke fifteen years previously, which deprived him entirely of the use of the right leg, and

rendered the left weak and numb. In six weeks was able to walk a little, but never recovered entirely, being always weak and lame. Fifteen months ago had a second attack, with total loss of consciousness for a week, and also complete loss of voluntary power of the *whole body*. For several weeks required the urine to be drawn off by catheter. He has lately had the urine passing involuntarily sometimes, at other times voided with great difficulty. He has never regained the power of his legs so as to enable him to stand or walk without assistance; and has been, for the last six months, growing worse. The arms very weak, being unable to raise the right higher than the head, and even that accomplished with great difficulty. Speech also very imperfect, and his ideas so confused that he could make himself understood with great difficulty. Hypnotized him for five minutes, when he could speak much better; could raise his arm and hold an umbrella perpendicularly, or horizontally, with his body, with perfect ease, and could walk across the room, and back again, WITHOUT ASSISTANCE, *for the first time since last seizure.*

(Signed) THOS. MORRIS.

Witnessed by JOHN SHIPLEY.

Duncan Street, Strangeways.

C. C. MORRIS.

JOHN W. PACEY.

JAMES BRAID, Junior.

15th, Had the pleasure of finding the improvement noted above was permanent, and also, that *he had been able to retain his urine and void it at pleasure,*

whereas it had been passing *involuntarily*, both by night and day, *immediately before being* hypnotized. He was again hypnotized to-day with additional advantage. 17th, Found him still better, having been able to walk in the street with *one stick* for the *first* time for *last five years*. Repeated the operation. 18th, Still better, so that, with the aid of his two sticks, he had walked into Ducie Street by himself. Operation repeated.

This patient went on improving, and on the 29th June was exhibited at my conversazione. His speech was greatly better immediately after *first* operation, and his ideas seemed more vivid and clear. He was also able to sign his name, and which he did very well, for the first time since his last seizure. Nor should I omit to add, that he had regained power over the rectum, which he had not previously; and in about ten days he had got sufficient power of his hands to enable him to work. After he was considerably recovered he had the misfortune to fall, and injured the lower part of the back very much, which impaired the recently acquired power of the legs. They are somewhat better, but not nearly so well as they were a few weeks after he had been under my care. His arms, however, still retain their increased power, as I saw him lately lift a bed-room chair with the right arm, and hold it up nearly at full arm's length; and the mind keeps pretty clear, much more so than before being hypnotized, notwithstanding he has had a severe attack of bowel complaint, from which he has been liable to suffer occasionally.

It would be difficult to adduce a more striking proof than the above, of the extraordinary power of

hypnotism, there having been so many points at fault, all of which were immediately meliorated, and some of them permanently so.

Case XXI. Mr John W., 21 years of age, called to consult me, 18th April, 1842, for a paralytic state of the left side of the face, of thirteen days' standing. He had no power of the muscles of the left side of the face, consequently the mouth was drawn to the right, and he had no power of closing the left eyelid. In ten minutes after being hypnotized, and friction used, he could open and close the eyelid with facility, and had the power of retracting his mouth to the left of the mesial plane.

Case XXIII. 11th July, was consulted by Samuel Edwards, who had been unable to work for six weeks, in consequence of a paralytic state of the extensor muscles of the wrist, and a semi-paralytic state of the flexor and extensor muscles of the fingers. He had injured the arm by a heavy lift, and by a blow about two years before. The paralytic state came on suddenly about six weeks previously to my seeing him, accompanied by a tingling or prickling feeling in the fingers. I hypnotized him, calling into action the weak and entirely paralytic muscles in the best way I could. In consequence of this, he acquired the power of flexing and extending the wrist, when the arm was held horizontally with the ulna downwards, and of grasping pretty firmly with the fingers, immediately after the first operation, which he could not do before, as witnessed by several highly respectable individuals who were present the whole time. On the evening of the following day, he was able to milk a cow with this hand, and when he called on me two

days after, I found him greatly improved. I operated on him again with additional advantage, and found him able to grasp so firmly that he could hold a single finger fast enough to enable him to be thus pulled from his seat without losing his hold.

He had undergone various treatment, including blistering, under two surgeons before I saw him.

17th July, 1842, he called on me, and had still greater power of the hand. After being again hypnotized, he could readily lift the one side of a heavy library table with the hand, which was quite powerless when I first saw him six days before. He stated, he had been able to work with it constantly from the time I saw him, on the 14th.

31st, He called on me, stated he had been improving. Was hypnotized once more.

August 7th, he called on me, and the first thing he did was to hold out his arm at full length, and shew me he could bend and extend the wrist, whilst the arm was in the state of pronation. He had been able to do so for some days. Had been able to milk *five* cows the day previous. Hypnotized him again, after which he had still more power. He has not required to call on me since, being nine months ago. This patient must have continued well, as I have heard nothing more of him, which I was to do if he had any relapse.

I could easily multiply cases of successful practice in the treatment of paralysis by hypnotism, were it not for occupying too much space. I shall, therefore, condense a few.

XXIV. A gentleman sixty years of age had a paralytic stroke two years and a half before consulting

me, which deprived him entirely of the use of the right arm, and enfeebled the right side and leg. When he called on me, he walked very feebly, could scarcely close the fingers and thumb, and could not extend them fully. He could with great difficulty raise the hand as high as the pit of the stomach, the pupil of the right eye was considerably larger than the left, and not quite circular; speech very imperfect. After being hypnotized for five minutes, he was able to open and close the hand freely, and to raise the hand above the head, and pass it to the back of the head, and he could also walk and speak much better. Pulse regular, —before operation, his pulse was very irregular. When he called on me next morning, I found the improvement had been permanent. I hypnotized him once more with advantage, and again on the two following days; seven weeks afterwards he called on me, when I found the improvement was permanent. He could speak and walk much better, could raise the arm, and move the fingers and hand freely, could pass the hand above and over the head, and take off his hat with it. The right pupil also was quite circular now, and nearly the same size as the other.

Case XXV. 4th June, 1842, Mr J. H., 67 years of age, had a paralytic stroke, 19 months previously, which deprived him entirely of speech, and of motion of right leg and arm. When he called on me, his speech was very imperfect, his hearing dull, and he had very little power in closing the hand, could raise the hand to the mouth, said he could sometimes raise it a *little* higher, but never so high as his head. After being hypnotized for five minutes, he could speak and hear much better, could grasp much stronger, and

would raise the hand *a foot above the head*, and put his coat on without assistance, passing it over his head. His walking was also much firmer. He seemed greatly pleased with being able to put his coat on, as it was the first time since his seizure. He was also able to sign his name for the first time, to attest the accuracy of my report of his case, which he did before two witnesses who had been present during the operation. He called on me twice after this, the last time two weeks from his first visit, when I found the improvement was permanent.

Case XXVI. Thomas Johnstone, 36 years of age, had a paralytic seizure, 13th February, 1842, which deprived him of feeling and motion of left arm and hand. Had partially recovered motion so as to be able occasionally to move the fingers a little, and to raise the arm nearly to the horizontal position, but frequently was suddenly struck with pain and total loss of power of the arm, and hand, and fingers, for four or five hours after. Had been struck in this way just before I saw him, and he was quite powerless, as above described, or rather the arm was spasmodically fixed to the side; had been under medical treatment ever since his first seizure. 4th May, 1842, hypnotized him for four minutes, after which he could move the fingers, hand, and arm freely, elevating it above his head, across his body in either direction, and could retain it in any situation he was asked. The feeling, however, was still very imperfect. 5th May, called on me to go to my lecture, when he had the complete control of the hand, arm, and fingers. He was hypnotized in the lecture-room the same night, and in four days after the feeling, as well as power, was

restored to it. 26th, called on me again, and has perfect voluntary power of the arm, as well as natural feeling and heat of the member. Attested as correct by the patient.

(Signed by proxy to which the patient affixed his mark) THOMAS JOHNSTONE.

Witnessed by JOHN HARDING.

I have also a copy of a certificate of his condition from the physician who attended him immediately before he consulted me. On the 20th January, 1843, his father informed me that his son had requested him to call on me, and say he was in America, and had remained well ever since I saw him, and, that he wished his father to express how grateful he felt for the benefit he had derived from my operations.

I shall only give one more case illustrative of this class.

Case XXVII. Mr H., 39 years of age, had been partially paralytic of the inferior extremities for ten years, which came on some time after a fall, accompanied with double vision. The latter disappeared under treatment, but the former increased. When he called on me, 18th February, 1843, he was walking with a crutch and stick, and with the assistance of both and a servant, it was with great difficulty he could ascend the few steps at my door. After the first operation, he could walk across the room and back again, *without either crutch or stick*, and after being operated on next day, he was able to mount twenty-eight steps to his bed-room without his crutch, and has done so ever since. In ten days, I was agreeably surprised to see him on the fourth bench of the lecture-room of the Manchester Athenæum, to which

he had ascended eighty-one steps, with the aid of a stick in one hand.

This patient had not been aware, until I called his attention to the fact, that he had very defective vision of the right eye, and was surprised to find on testing this, that when the left eye was closed, he could with difficulty see the large heading of the leader of the Medical Gazette, whereas he could read the ordinary sized print of that article with the left. After being operated on, he could read the small print of the leader with the right eye also, at which he felt greatly surprised, as well as at the increased power of his legs, because, as he had been conscious all the time of the operation, he could not believe I had done any thing to him, till he found on trial he had been so much benefited in both functions.

Here, then, we have the beneficial results most unequivocally ensuing even when the patient imagined no effect could have been induced. The improvement in the sight has remained permanent, and he also improved in the power of his limbs, till he had the misfortune to fall, whilst carelessly looking at something when walking on the street one day.

In confirmation of the efficacy of a few minutes of hypnotism, in curing many cases of paralysis, I may refer to the reports of the Liverpool papers, as to what took place at my lectures in that town in April, 1842. There were hundreds who witnessed the effects when I publicly operated on such patients, who were entire strangers to me. Cases where the patients had been for years powerless of limbs, so that they could not unlock the clenched hands, nor raise the arm to the chin, even with the aid of the

other arm, have been enabled in eight or ten minutes, to open the hand, and lift the arm above the head. My intelligent friend, Mr Gardom, lately informed me, he had treated a paralytic case most successfully by hypnotism.

Case XXVII. Mrs E., thirty-seven years of age, had a paralytic affection when thirteen months old, which deprived her entirely of the use of the right leg, which has never been recovered. At seven years of age, she had a second attack, which deprived her also of the use of the right arm, which was recovered after nine months' professional attention to it. At fifteen years of age she had a third attack, which drew her face, and deprived her of speech for some time, but was recovered from; and she had no farther attack of the sort till 8th January, 1842, (being twenty-two years from former attack.) The latter attack enfeebled the right arm, and completely paralyzed the whole of the *left side*.

Being of full habit, she was bled from the arm, had active cathartics, leeches, and blisters. In six days there was improvement to this extent, that the right hand could be raised as high as the shoulder, the left arm could be moved feebly, and the hand closed feebly and slowly. When sitting on a chair, the left leg could be moved with great difficulty, so as to raise the heel from the ground. I hypnotized her, and in five or six minutes she could raise her right hand and arm *above her head*, could move the left arm freely, and grasp firmly, and could raise the left leg so as to place the heel eighteen inches from the ground. Next day she was able to walk across the floor with her one crutch. A pain in the knee induced her to

avoid walking afterwards, but in three weeks she could walk quite cleverly as before last attack.

The other cases were all in the chronic state, of long standing, and had resisted all ordinary means, and the restorative powers of nature and time, and yet we have seen what extraordinary powers can be exerted, and effects produced, in such cases by hypnotism. The latter proves its superior efficacy, to other means, in more recent cases.

Case XXVIII. I shall conclude the subject of paralysis with the following most interesting case. The subject of it was Miss Atkinson, a middle-aged and very intelligent lady, and I shall give the case as recorded by herself in a letter she was so obliging as to furnish me with, for the purpose of publication in this work.

LETTER FROM MISS E. ATKINSON,

(*of the Priory, Lincoln.*)

"MOSLEY ARMS, MANCHESTER.
Monday, 4th July, 1842.

"Dear Sir,—I have very great pleasure in furnishing you with a statement of my case. I beg you will make whatever use of it you think proper, and most sincerely do I wish that it may lead others suffering from disorders on the nerves, to seek relief from the same source, and with the same success.

"In January, 1838, I was attacked with cold and influenza, accompanied by a violent cough, on the 29th of this month. Ten or twelve days after the first attack, without any previous warning, my voice

left me instantaneously, and I could not utter a sound louder than the faintest whisper. For three weeks I had no medical advice, hoping daily, from my ignorance of the nature of the complaint, that my voice would return ; but being disappointed, and feeling my health and strength declining, I consulted Mr Howitt, an experienced and eminent surgeon in Lincoln, who immediately requested I would confine myself to my own lodging-room, which was to be kept at a regular temperature. He prescribed such medicines as my case required, and ordered blisters to my throat and chest, which were kept open, until I became so completely debilitated that it was considered necessary to discontinue them. Towards the latter end of April my health was considerably improved, and I was allowed to leave my room, though my voice was still merely a feeble whisper. Shortly afterwards, I paid a visit to a sister in York, whose family surgeon, Mr Caleb Williams, a man in extensive practice, prescribed for me, and took great interest in my case. Soon after my return to Lincoln, I consulted Mr Joseph Swan, 6, Tavistock Square, London, who entirely approved of the treatment I had undergone, and prescribed such additional remedies and medicines as he thought would be beneficial. Since then he has continued to visit me whenever he has been in the country. Galvanism has been tried without producing any effect ; electro-magnetism also, by a scientific friend (not a medical man.) I have frequently conversed with several other professional gentlemen, who have also taken a great interest in my case. They all agree in opinion that the attack was paralysis of the organs of voice, without disease ; and that

the treatment I have undergone has been most judicious ; in fact, that every thing has been done for me the medical profession could suggest. Every one of them has told me, that when my health and strength returned, there was every reason to believe I should recover my voice. I remained in a very weak and delicate state for some time, but have now been in perfect health for more than twelve months, yet without having the power of speaking above a whisper.

"I considered the recovery of my voice hopeless, until hearing of the many cures you had performed by hypnotism, I was induced to state my case to you, and request your opinion as to the probability of this system benefiting me. Your reply was, '*If*, as seems to be the opinion of most of the professional gentlemen consulted, your loss of voice is owing to *exhaustion* of the *nervous energy* of the *vocal nerves*, and not to *positive destruction of any portion of them*, I consider my mode of operating is likely to be very speedily successful. On the other hand, if there is positive destruction of the nervous substance, *with loss of continuity of the principal trunks of the nerves*, it will alter the chances very materially. However, as this cannot be positively known without trial, and as the extraordinary power we possess of rousing nervous energy may be sufficient to enable the function to be restored with a state of nerve which could not be of service under any other agency, I should decidedly give it as my opinion that it ought to be tried, as no risk can attach to the trial, and a week or two at most, will be all the time required for giving it a fair trial.' This raised my hopes ; I came to Manchester on

Tuesday the 28th of June. You operated on me twice that evening, and twice each succeeding day, but without producing any change on my voice until Saturday, July 2d, when, on rousing me from the hypnotic state, I spoke aloud without the slightest effort. My voice was then weak ; you have continued to operate on me until now, Monday morning, (4th July,) and my voice is fully restored to its original strength, with the power to vary its tone at will. Thus has hypnotism given me back the power to make myself understood by those to whom I address myself, of which I had been deprived for the last four and a half years. I have not suffered the slightest pain or inconvenience while submitting to the operations, nor any unpleasant effects afterwards ; neither did I ever once lose consciousness of all that was passing around me.

"With heartfelt humble thanks to our heavenly Father for this and every blessing, particularly for the hitherto unknown power bestowed on man ; and with deep gratitude to you for your kind attentive care while so skilfully and successfully using this power for the restoration of my voice, I beg you to believe me, dear sir, yours very respectfully, and greatly obliged,

"Elizabeth Atkinson.

It is but justice to the professional gentlemen who had been consulted in this case prior to application being made to me, to say, that I consider they had treated the case most judiciously, according to our previous experience in such cases; and it must be interesting to them to find that in this agency our

art has acquired a new and efficient resource for such cases.

This case is interesting in many points of view. The circumstance of the patient having been operated on twice each day successively, that is, *eight* times, without any visible improvement — for I had her tested before and after *each* operation — and being able to speak aloud, without effort, on being roused from the hypnotic condition on the *fifth* day, is sufficient proof that the improvement was *not the effect of imagination*, but of the physical condition induced by carrying the operation farther. Any effect to have been anticipated from mere mental emotion, we should have expected to have been greatest at first, and to have become less and less as the party became familiar with such operations. Here, however, it was quite the reverse. I found, on testing the patient on the 2d of July, *immediately before being operated on*, that no improvement had been effected from the former operations, (she had been operated on eight times,) and thereforo resolved to carry it farther that time; and the result was, as noted above, that on being aroused she spoke aloud without effort. It is also important, as corroborating the statement of many others who have been cured of various obstinate complaints by hypnotism, that they *could hear quite distinctly, and retained consciousness the whole time*, of all that was going on around them. In some cases, however, it is necessary to carry it to the ulterior stage, or that of *insensibility*.

On the 19th October, 1842, I had the pleasure of receiving a letter from Miss E. Atkinson, from which I make the following extract, in proof of the *perma-*

nency of the cure. "You will be glad to hear that I have retained my voice without any intermission, since I left you. The only difference is, that it has become stronger; and my health is in every respect perfectly good." I had also the pleasure of hearing from a friend, a few days ago, that she still continues well, and it is now nine months and a half since her voice was restored.

I doubt not there may be some who, on reading the cases I have recorded in this treatise, will be disposed to appeal to the well-known fact, that various complaints have been suddenly cured by mere mental emotion, hoping thus to throw discredit on the curative powers of hypnotism. Whilst I grant the premises, I deny the justness of the inference. That I may meet the subject fairly, I shall now quote some of the most remarkable cases of the sort which have been recorded. "Dr Gregory was accustomed to relate the case of a naval officer, who had been for some time laid up in his cabin, and entirely unable to move, from a violent attack of gout, when notice was brought to him that the vessel was on fire; in a few minutes he was on deck, and the most active man in the ship. Cases of a still more astonishing kind are on record. A woman, mentioned by Diemerbroeck, who had been many years paralytic, recovered the use of her limbs when she was very much terrified during a thunder-storm, and was making violent efforts to escape from a chamber in which she had been left alone. A man, affected in the same manner, recovered as suddenly when his house was on fire; and another, who had been ill for six years, recovered the use of his paralytic limbs during a violent paroxysm

of anger." Abercrombie *on the Intellectual Powers*, pp. 398-9.

To these might have been added the influence of the sight of a tooth key or forceps, or even the approach to the house of a dentist, in curing tooth-ache.

Now, what are the legitimate conclusions to be drawn from the history of such cases? Is it not simply this, that such results *are possible*, and that they can be effected by *different means?* Now, as it is apparent that analogous results can be induced by hypnotism, I would ask is hypnotism not quite as convenient and desirable a remedy as setting a ship on fire, raising a thunder-storm, converting the patient's house into a bonfire, or exciting him into "a violent paroxysm of anger?"

Again, of those who talk so much about the power of imagination, I would ask, what is it? How does imagination act to produce such extraordinary and contradictory results? For example, the mental emotions of joy and sorrow, love and hatred, fear and courage, benevolence and anger, may *all* arise either from *real*, or from *imaginary causes only*, and may seriously affect the physical frame. In many instances these different and opposite emotions have proved almost instantly fatal; in other instances equally sanative. How is this achieved? Are not the whole of the emotions accompanied by remarkable physical changes, in respect to the respiration and circulation as well as sensation? Are they not highly excited in one class, and depressed in the other? And may not this act as the proximate cause in effecting the permanently beneficial results during

hypnotism? As already explained, analogous physical results can be produced by hypnotism; and it is no valid reason why we should not profit by it in the treatment of disease, that we cannot positively decide as to its *modus operandi*. It seems quite evident that we have acquired, in hypnotism, a more ready and certain control over the physical manifestations referred to, and which can be turned to useful purposes, than by any mode of acting on the imagination only, which has hitherto been devised.

Rheumatism is another affection, for the relief of which I have found hypnotism a most valuable remedy. I have met with some cases of rheumatism, however, which have resisted this, as they had every other method tried; and others, where it afforded only *temporary* relief; but I am warranted in saying, that I have, on the whole, seen far more success, more rapid and decided relief, follow this mode of treatment, than any other. It has been chiefly in chronic cases in which I have tried it. In its application, I first induce the somnolent state, and then call into action the different muscles which I consider directly affected, or which, by being so called into action, are calculated to change the capillary circulation and nervous sensibility of the part implicated. The patient must be retained in such position a longer or shorter time, according to circumstances. The following cases will illustrate the effects of this mode of treatment:

Case XXIX. Joseph Barnet, near Hope Inn, Heaton Norris, Stockport, 62 years of age, called to consult me on the 10th December, 1841, for a severe rheumatic affection of the back, hip, and leg, of thirteen years'

standing, which had been so severe, that he had not been able to earn a day's wages during that period. He had been equally a stranger to comfort by day, as to refreshing sleep by night. He came to me leaning feebly over his stick, suffering anguish at every step, or movement of his body. He was treated at the commencement of his complaint by a surgeon ; but feeling no relief, like many others similarly afflicted, he had recourse to all sort of nostrums, and also to hot salt water baths. I hypnotized him, placing him in such attitudes as his particular case required, and in fifteen minutes aroused him, when he was able to bend his body freely, and not only to walk, but even to run. He called on me in a few days after, when he stated he had slept comfortably, and been perfectly easy from the time he left me till the night before. I hypnotized him again with advantage, and a few more times sufficed to restore him entirely. This patient was seen, and bore testimony to these facts, at two of my lectures. After one of them, from being too late for the coach, he walked home, a distance of six miles. This was by no means judicious, but proves incontestably his great improvement.

I was not at that time so well aware, as I have been since, of the great power of hypnotism in such cases, and therefore ordered him some medicine after the first operations; but from observing that the relief immediately followed the operation *before taking medicine*, and that the pain returned in some degree the night *before next visit*, and when, had there been benefit resulting *from the medicine, it ought to have been diminished after using it*, and that relief was again afforded during the hyp-

notism, I felt convinced the *medicine* had *no share in the improvement*, and therefore discontinued it, and trusted entirely to hypnotism. In the beginning of January, 1842, when this patient called on me, he was so well, that I told him farther operations would be unnecessary for the present, but added, that should he have any relapse, if he called on me again, I would hypnotize him, without charge, of which offer he promised to avail himself.

At my lecture on the 27th December, 1841, several questions were put which elicited the following answers: — "Do you mean to say you were never so well as you are now?" "Yes; I never earned two shillings during all that time. This last winter I was worse than ever." "Did you walk, sir, before ever you left my surgery, without taking any medicine?"—"I did, and ran too." See *Manchester Guardian*, 1st January, 1842.

I heard nothing farther of this patient for about seven months, and therefore, after the offer I had made him at last visit, had every reason to conclude he had remained well. However, it appears he had a relapse shortly after he left me, and his family, upon whose exertions he depended, being out of work, he could not afford to pay the railway charge for coming to see me again. His relapse having been laid hold of, and construed into a charge against me as having falsely represented his case, I was induced to call on the patient, accompanied by two friends, when he furnished us with the following document,—

"Joseph Barnet, Providence Street, Heaton Norris,

had suffered from a severe rheumatic affection, prior to last December, when he applied to Mr Braid. He was first under the care of Mr ——— Higher Hillgate, who bled, blistered, and prescribed medicines for him ; but the complaint remained unabated. From this period, took various medicines, and other means recommended to him by those who had been similarly afflicted, and who considered he would be benefited by such means as had relieved them, but received no relief. After that applied to Mr ——— of Manchester, from whom he considered he derived benefit for a fortnight ; but the pain returning, he went to Liverpool to the warm baths, where he remained as long as money lasted, but without being relieved.

"From this time tried various means as recommended by different parties. During the whole of this period, he had never been able to earn a day's wages. When he applied to Mr Braid in December last, (1841,) had been suffering extreme pain in every movement of the body ; in short, he had walked nearly double, supported on a stick. He was operated on by Mr Braid, and in a quarter of an hour he was roused, and found himself able to walk and run. At first, Mr Braid walked him about by the hand, and afterwards made him run without any assistance whatever, as his wife and others present can testify. The case as stated by Mr Braid in his lectures in my (his) presence was perfectly correct, as I (he) bore testimony to at the time. Owing to being unable to pay the expenses of the railway, he did not return to Mr Braid, when he had a recurrence of the pain. He had never informed Mr Braid, that he had had a recurrence of the pain, and

never saw him afterwards until the evening of the 26th July, 1842.

(Signed) his
JOSEPH + BARNET.
mark
J. A. WALKER.
THOMAS BROWN.
HARAIT BROOKS."
(Daughter of J. BARNET.)

Case XXX. 11th January, 1840. Mrs B. 48 years of age. Catamenia ceased last spring. Has suffered from a severe rheumatic affection for the last three months, and been confined for the last two months to her bedroom. The legs, arms, neck, and head, were excessively painful, so that the slightest movement was attended with great agony. She was quite alarmed at my taking hold of her arm to feel the pulse. When in bed could not turn over, nor bear the slightest touch. 11th January, 1842, hypnotized her, and roused her in ten minutes, when she was quite free from pain, being able to walk, stoop, and move the arms, wrists, and fingers, with perfect freedom. 12th, had slept comfortably all night; had been able to lie on her side, which she could not do before for three months; could rise from the chair, and move legs and arms without pain. There was, however, a soreness or uneasy feeling, although not amounting to pain, in some parts of the limbs. Hypnotized her for eight minutes, when she felt less of the numbness, and followed me down stairs, and ascended them again, without taking hold of the banister, and taking the steps regularly and cleverly with both feet alternately. 14th, Found her down stairs enjoying herself with her father, hus-

band, and friends, almost quite well. Hypnotized her again, and also in a day or two after, and she had no recurrence of the rheumatism, although a degree of stiffness of the limbs remained. She had no medicine from me till the rheumatism was gone, when she had some for a different complaint. This patient was seen at my house seven months after by about sixty friends, including several professional gentlemen, when the above statement was read in her presence, and confirmed by her as correct to that time; and as I have heard no intimation, I feel assured she has not had a relapse.

Case XXXI. Mrs S. has been already referred to, case VI. She had suffered much from rheumatism for many years, and had never been entirely free of it, notwithstanding she had undergone much treatment. After first operation she was much relieved, and after a few more was entirely free from pain. It has recurred occasionally since, but has always been removed by one or two more operations of the same sort, and which are neither painful, nor in any way unpleasant.

Case XXXII. Another rheumatic case of a patient 53 years old, of seven years' standing, where sleep had not only been courted by exhausted nature, but also by the most powerful doses of narcotic drugs; on one occasion 400 drops of laudanum had been taken in *two hours*; still the pains continued, and yet, by *fifteen minutes* of hypnotic sleep, procured by the simple agency I recommend, this patient was relieved of his agonizing pains. In this case, from my knowledge of the eminence of the professional gentleman who had prescribed for him, I feel assured every known

remedy had been resorted to, but without effect, and yet this agency succeeded in a few minutes. This patient had suffered severely for seven years; was first hypnotized 10th February, 1842, and again on the 17th and 19th. He seemed as nearly as possible entirely free from pain, and had suffered very little after the first operation, less than at any previous period during the seven years he had been a rheumatic subject. I have lately heard he had a relapse some time after I last saw him; but no reasonable person could expect three operations should have sufficed to eradicate such an obstinate complaint permanently; most probably a repetition of the process would.

Case XXXIII. Mr John Thomas, 155, Deansgate, consulted me at the end of April, 1842, for a severe rheumatic affection of the loins, and right hip and leg, which had continued for two weeks. Had a rheumatic fever two years before, which confined him to bed for sixteen days, and to his room for a week longer; and he did not get rid of the pains for three months after he was able to go out, although he tried Buxton and Matlock baths, and also the medicated and sulphur baths in Manchester. When he called on me, (April, 1842,) I hypnotized him, and when roused he was almost entirely free from pain, and never required a repetition of the operation. He had no medicine. On the 28th July, he called on me to say he had continued quite well in every respect from the time he was hypnotized, and attested the same, and the correctness of the above statement, by appending his name to it in my case-book, and he has also been seen by many professional and other friends who can

bear testimony to the same effect. He continued well when I saw him lately.

Case XXXIV. Master J. Lancashire, 12 years of age, was brought to me in September, 1842. He was suffering from a violent rheumatic affection of the legs, back, and chest, so that he required to be carried into my house. After being hypnotized, he was so much relieved as to be able to walk about the room freely, and to walk to his cab without assistance. Next day he called, and was hypnotized again, and left my house quite free from pain, and has kept so well as never to require another operation. He had no medicine, either externally or internally. His mother and he called some time after to inform me he had remained quite well, when they both attested the correctness of the above statement of his case.

Case XXXV. Mrs P., a lady upwards of 50 years of age, had suffered so severely from rheumatism that she had not enjoyed a sound night's sleep for seven months. External and internal means, which had been beneficial in a former similar attack, had been tried without effect, before I was sent for to visit her. She was suffering excruciating pain in one leg, particularly about the knee joint. When I proposed to relieve her by hypnotism, she repudiated the idea, told me she had no faith in it, and felt assured in her own mind such an operation could be of no use to her. I told her I cared little for her want of faith in the remedy, provided she would submit to be operated on as I should direct. She at last consented, and in the presence of her three daughters was hypnotized. In eight minutes she was aroused, and was quite free

from pain ; wished to know what I had done to her ; said she felt assured hypnotizing her could not have relieved her. To this I replied by asking where her pain was felt now. She answered she felt no pain, but persisted she was sure I had done nothing to take it away. The manner in which she could walk and move her limbs was sufficient proof the pain was gone, notwithstanding her scepticism about the agency. When I called next day, I was informed by her family *she had slept comfortably all night*, and had gone out, being quite well. Two days after I called again, and was informed by her that she had been overtaken in a shower, and had over-exerted herself on that occasion, and had had a return of the pain, although not so bad as at first. I hypnotized her again with complete relief, and she has never required a repetition of the operation since, so that she has now enjoyed a release from her old enemy for eleven months, in defiance of her scepticism. Here, then, we have a very decided proof that it was not imagination ; in short, that it was a physical and not a mental change which effected the cure.

Case XXXVI. Mr Hampson, another rheumatic case, I was called to 16th May, 1842. The patient was a powerful young man, 23 years of age ; had suffered severely for three weeks, the last two been entirely confined to bed, unable to move his legs, or to feed himself ; for two weeks had not known what it was to have ten minutes continuous sleep, from the violence of the pain, and spasmodic twitching of the limbs rousing him. His left hand, fingers, and wrist were so swollen and painful, that he was quite alarmed at my attempting to feel his pulse. After being hypnotized

for five minutes whilst in the recumbent posture, I had his arms extended, and he was now roused and able to move the wrist and fingers with comparative ease. I now hypnotized him once more, and operated on his legs. In *six minutes* he was able to get on his feet, walk round the bed and back again, and get into bed and lie down *without assistance*. Next morning I found him up and dressed, and able to walk very comfortably. He had slept well through the night. I hypnotized him again. Next night he slept uninterruptedly, and in the morning felt nothing of his pains excepting in the left shoulder; but this was quite well by the next day. He had no medicine except a mild aperient.

The cases adduced I consider sufficient to prove this to be a valuable agency in the treatment of *chronic* rheumatism. I shall now adduce the results of its application in two cases of *acute* rheumatism.

Case XXXVII. Mr G., a literary gentleman, consulted me last winter. I found him complaining of severe pain in the right arm and hand; one point, the size of a crown piece, on the outer edge of the arm, a little below the elbow joint, was exquisitely painful. He was enveloped in double clothing, but, notwithstanding, was quite starved and chilly with cutis anserina, pulse 120 strokes a minute. I told him I considered it was the commencement of an attack of rheumatic fever, and I should wish to try whether it could be cut short by hypnotizing him. He had never been operated on in this way before, but readily assented. In six minutes I had him bathed in perspiration, and his pain greatly relieved. He was now ordered to bed, to take a mixture with

vinum colchici. Next morning I found him much freer from pain, it had never been severe since the operation the day before, the skin comfortable, and his pulse only 80. To remain in bed and continue his medicine. Next day the pulse was 70, and no complaint of pain, and the following day he was able to go out and attend to his business. No relapse.

Case XXXVIII. Mrs B., the mother of a numerous family, had a severe attack of rheumatic fever, affecting different joints in succession, and also violent pain in her head. I proposed she should be brought out of bed and hypnotized. The pain of her knees, feet, and ankles, was so severe that she could not stretch her legs, nor attempt to support herself, in the least degree, upon them. She had therefore to be carried from the bed to the chair where she was to be hypnotized. In five minutes she was roused, the headache gone, and the pain in her legs and feet so much relieved that she was able to walk to bed, requiring only to be slightly supported by the arm. The pains never returned with the same degree of severity. She was hypnotized a few times more, and always with benefit. Of course I prescribed such medicines as I considered necessary to improve the state of the secretions, so as to put as speedy a termination to the attack as possible, but there could be no doubt that hypnotism contributed very much to meliorate her suffering, and also in bringing the attack to a more speedy termination, than would have been the case had I trusted to the effects of medicine only.

The following cases can perhaps scarcely be introduced in any other place with more propriety than the present. They are cases of painful affection of

the members, arising from irregular action of the muscles, consequent on mechanical injury.

Case XXXIX. Mr J. J. consulted me on the 6th November, 1842. He stated he had a fall from a horse five months previously, when he sustained severe injury of the left hip and thigh. He was confined to bed for two weeks, under medical treatment, supposing the parts to be only bruised and sprained. He then began to move about with crutches, but with great pain; and a consultation being held, it was considered there was dislocation of the hip joint, but the attempts made to reduce it failed. At the end of nine weeks from the accident, another surgeon, 40 miles off, was sent for, who confirmed the opinion that there was dislocation of the hip joint, and he succeeded in reducing it. The patient was now confined to bed for two weeks, and, on rising, was able to move about with the aid of a stick, but without crutches. However, he was still very lame, and in much pain. When he called on me, which was on the 6th November, 1842, he was not suffering much pain, but was extremely lame. The knee was a little advanced forwards, and the toes considerably everted. In attempting to walk without the aid and support of his stick, the body was thrown so much to the left at every step, as if the leg were considerably shorter, that with other circumstances coupled with this, led me to suspect fracture of the neck of the femur within the capsular ligament. A minute examination satisfied me this was not the case; and I now considered the affection was one of irregular action of the whole muscles of the hip and thigh, some being atrophied and semi-paralyzed, and others inordinately tense.

With this view I believed I should be able to rectify the irregular distribution of nervous and muscular energy by hypnotism, an opinion the correctness of which was quickly verified. Having hypnotized the patient, and placed the leg in that position calculated to restore the functions according to the view I had taken, in about six minutes he was roused, and was agreeably surprised with such a remarkable improvement. Next morning he was again operated on, and was then almost entirely free from lameness, and entirely free from pain, so that he asked my opinion whether I considered it at all necessary for him to take his stick in going through the town on some business. He called on me the three following days, after which he went home, equally gratified as myself with the result of our operations. He had no internal medicine, nor external application, whilst under my care. He attested the accuracy of the above report before leaving; and, as I have not heard from him since, have reason to believe he continues well.

This patient was seen by several gentlemen, some of them members of the profession, who can bear testimony to the correctness of these statements, as they had an opportunity of hearing the whole from the patient himself.

Case XL. Mr J. H., 68 years of age, called to consult me on the 8th November, 1842, relative to a painful state of his left shoulder, the consequence of a blow he had sustained two months previously. He had been under the care of two eminent professional gentlemen from the time he received the injury till within a few days before I saw him. There was a wasting of the muscles about the shoulder, great pain

in moving the arm, and it was so weak that he had not been able even to button his coat with it. After being hypnotized the first time he could use it, raising it above his head, and moving it in any direction with ease and freedom. After being operated on next day he had still more power. The following day he felt a little pain behind the shoulder, under the scapula, which was entirely removed by being once more hypnotized, and calling the affected muscles into action. On Saturday, the 12th November, 1842, he left me, quite well, to return home to attend to his business. Both this patient and his son attested the correctness of the above report in my case book.

Case XLI. J. W., 25 years of age, had a severe injury of the hip, which was followed by suppuration between the trochanter and ischium, where there was a fistulous opening; the leg was flexed and perfectly useless, being supported by a sling passed over his shoulders, whilst he supported himself very feebly on two crutches, his health having suffered greatly during his affliction. He stated that he had just left a public institution, where he was given to understand no hopes were entertained of his recovery. I hypnotized him, and during that condition regulated the malposition of the limb, stretching the contracted muscles, and strengthening others, by exciting into action those which had been weakened by being overstretched and enfeebled by inaction. The result was, that on being aroused he could straighten his leg, and walked (using his crutches of course) with the sole of his foot resting on the floor. He was operated on daily with the most marked improvement both as regarded his leg and his general health. In

three weeks he could walk with one crutch, in two weeks more threw that aside, and walked with a stick, and shortly after could walk without that aid, and is now well, excepting a little weakness of the ankle joint. He had no internal medicine from me, and no external application, excepting one box of ointment, the discharge having entirely ceased within a week of his being under my care.

I shall now advert to the remarkable power of this agency in speedily overcoming nervous headache. I have so many examples of this, sometimes two or three fresh cases in a-day, that it is almost useless to instance individual cases. However, I shall give a few.

Case XLII. Mrs B., the mother of a family, has been constantly annoyed with headache and maziness, for the last two or three years, varying in intensity at different times, but never entirely free from it. Consulted me, 22d January, 1842, for the above complaints, and also stated that she was subject to attacks of epilepsy. I hypnotized her, and in five or six minutes aroused her, when she was quite free from headache. She was hypnotized almost daily for some time, and remained quite free from headache, five weeks after she was first operated on, and had much less of the mazy feeling, and no fit for two months. She appeared so much better as to be taken notice of by all her friends.

Case XLIII. Miss B., daughter of the above, was brought to me on the 23d January, 1843, in consequence of the improvement her mother had experienced from the operation. She had suffered severely from headache for six months, so much so, as fre-

quently to cause her ery and shed tears, and was never entirely free from it for that period. I hypnotized her, and in five or six minutes roused her quite free from headache or any other ache. She was operated on almost daily for some time, and has had no return of the headaehe to this time, — four months, — and has had her appetite mueh improved, and looks very mueh better. She had no medieine.

Case XLIV. Miss S., on the 25th January, 1843, was suffering from a most violent headache, and had been so all day. She eould scareely open her eyes or see when they were open, and seemed quite prostrated. I hypnotized her, and in five minutes she was aroused quite well, and has had no return of it at the end of ten days.

Caso XLV. Miss N., 20 years of age, had suffered severely from headaehe from ehildhood, and never knew what it was to be entirely free from that eomplaint, but frequently had it so severely as to ineapaeitate her for any exertion, and almost to deprive her of sight. She also had eonstant uneasiness at stomach, sometimes amounting to severe pain, and when the attaeks of headache were at the worst, the pain at stomaeh was also mueh aggravated, and a severe attaek of vomiting generally terminated the violence of these paroxysms. In April, 1842, I hypnotized her, and from that period she has been almost entirely free from both headaehe and stomaeh eomplaint. At the end of fifty-four weeks, I had the pleasure of hearing from herself, as I had previously from her mother, that she seareely had suffered from headaehe at all sinee the operation, and never severely, or even in the slightest degree for one hour at a time.

Case XLVI. Mrs T. had been suffering from severe pain of the head for more than two weeks, without intermission either by night or day when awake. She had also had severe pain of the left side of the chest for three weeks, which was aggravated by a cough. For the last two days, the pain of the side had been most distressing. The pulse was rapid, the cough frequent and severe, and the pain in the side so acute as to prevent free expansion of the chest as in ordinary respiration. I found there was considerable spinal tenderness on pressing betwixt the shoulder blades. I hypnotized her, and in five minutes, when aroused, she was quite free from headache, the pain in the side so much relieved, that she could move her body freely, and take a moderate breath with very little inconvenience. Next day I found she had no return of the headache, and very little of the pain in the side. She was again hypnotized with advantage, which I repeated daily, and in six days the pain of the side was quite gone, the pain of the head had never returned, the cough was gone, the spinal tenderness which disappeared at first operation had never returned after the first operation, and the patient was now quite convalescent. She had no medicine but some pectoral mixture to moderate the cough.

I shall now refer to spinal irritation, which is well known to be the source of much suffering, not merely in the course of the spinal column, but also, from its influence on the origins of sentient nerves, on distant parts of the body. I have already referred to this in the cases 16 and 19, where there was loss of feeling and motion in one case, and pain of the legs with contraction in the other. Where the affection does

not depend on active inflammation, I hesitate not to say, that the pain of the spine, and other painful affections dependant on the state of the spinal nerves which arise therefrom, may be relieved more speedily, and certainly, and effectively, by hypnotism, than by any means I have either tried, read, or heard of. I shall give an example or two.

Case XLVII. Miss C. had suffered for years from spinal irritation and headache, the pain extending round the chest, so that deep breathing or free motion of the chest could not be tolerated. I tried every variety of treatment, but in vain, and at last despaired of benefiting her, and, from the extreme difficulty of breathing, suspected it must end in pulmonary consumption. I now tried hypnotism, which immediately succeeded in relieving the whole catalogue of painful symptoms, and she was speedily restored to perfect health, and has continued so ever since.

Case XLVIII. Miss —— had suffered much from spinal irritation for years, and had undergone much severe treatment. Had been restored to health and strength under my treatment, but was again threatened with a relapse. I hypnotized her, and when roused, the spinal tenderness was gone. A few more operations made a most marked improvement, and she continued well for some months. She had a recurrence of the complaint, when hypnotism was again had recourse to, with immediate and decided advantage.

I could easily multiply cases of this sort, were it not for swelling the volume unnecessarily. I shall therefore pass on to cases of irregular or spasmodic action of the muscles. I have found it decidedly use-

ful in several cases of chorea; and also in cases of nervous stammer. In epilepsy it also frequently proves highly useful, but there are some varieties of this complaint over which it has no control. These I presume are such cases as depend on organic causes, and which are found to resist every known remedy. It is however well known that many cases which were supposed to have been of this class have worn themselves out, or time and the efforts of nature have effected some organic change. Whether hypnotism, if persevered in, might have a tendency to expedite the favourable result in such cases, I am not prepared to say, but think it highly probable it might do so. I feel quite confident, however, that in cases which are amenable to treatment, this will be found one of the most speedy and certain remedies. Of all the complaints for which mesmerism has been lauded as beneficial, there are none so conspicuous as epilepsy, as has already been referred to in the introduction. As the effects of hypnotism are so nearly allied to mesmerism, it would be superfluous for me to detail a number of cases, I shall therefore give only a few.

Case XLIX. A girl who had been liable to six or eight fits in 24 hours, had only one the day after she was first hypnotized, none for next five days, and was shortly quite well.

Case L. John Barker, aged 19 years, applied to me in August, 1842, for epileptic fits. He had first been seized with them when four or five years of age, at first every week or fortnight, but as he got older, became more frequent, so that, for some months previous to applying to me, he had had as many as three fits a-week — had been under treatment at a

public institution for two months before calling on me, and had a great variety of treatment, but derived no benefit, and was then told by the attendant, that he must never expect to get rid of them. He was subjected to my usual hypnotic operation for such cases, was operated on ten times altogether, and has had but one fit since he was operated on; and that was the day after first operation. He had no medicine from me excepting three aperient powders. He has now been free of the fits for upwards of nine months.

Case LI. Mrs B., the mother of a family, had been subject to epilepsy for seven years, and notwithstanding every variety of treatment, allopathetic and homœpathetic, she had an attack at least once a month. From the time she was hypnotized she had no fit for four months, and has had none since.

Case LII. Miss B. had been subject to fits for nearly two years, latterly had as many as five and six a-day; consulted me the end of December, 1842; was hypnotized seven times, and had no return of the fits for four months, when she had one, and in two weeks after a second.

Hypnotism may be applied with great success in the treatment of various distortions, arising from weakness of certain muscles, or inordinate power or contraction of their antagonists; and I feel convinced, that by this means, we may rectify many of those cases which have hitherto been treated by section of the tendons or muscles. The success which I have already had, by this means, of treating *lateral curvature* of the spine, warrants me to speak very confidently on the subject, in most cases. *I feel convinced*,

there are very few recent cases which may not be speedily cured by hypnotism, without either pain or inconvenience to the patient. Patience and perseverance will of course be necessary where the disease has been of long standing, and though in such cases the cure may not be perfect, the patient may be greatly improved by hypnotism.

The method of treating such cases is, first to induce the sleep, and then to call such muscles into action as are calculated to bring the body into the most natural position. By bringing these muscles into play during this condition, they acquire increased power, and ultimately are permanently strengthened. As one side of the chest is enlarged, and the other collapsed, I endeavour to restrain the enlarged side, by applying compression to it during the sleep, whilst the patient is directed to take deep inspirations, so as to expand the *opposite* side. I also endeavour to make the patient stand in a position *the very reverse of that which I consider to have been the chief cause of the curvature.* As already remarked, I feel convinced this method will prove very speedily successful, more decidedly so than any other mode of treatment I know of, and *especially in such cases as are accompanied with spinal irritation.*

Case LIII. The following is a case of its remarkable success with a young lady, 14 years of age, who had had the advice of some of the most eminent members of the profession in the provinces, and also in Dublin and London. She was first observed to become malformed when four years old. When brought to me on the 12th September, 1842, her chin rested on her breast, and there was no power of raising it, from the weakness of the recti muscles of the back, and

contraction of the sterno-cleido-mastoid muscles. The dorsal part of the spine and shoulders were thrown backwards, the lumber vertebræ and pelvis were thrown forwards, so that the deformity was very great, and the vigour of the mind, as well as of the body, was greatly impaired. She had no medicine nor external application, but was hypnotized night and morning, and treated in the manner referred to, and the result was, that in six weeks she could hold herself so much better, that when the outline was taken, it was found that her spine was three inches nearer the perpendicular than when I first saw her. During this period, no mechanical means had been used, nor throughout any part of the time she was under my care were any resorted to, with the exception of a support for the chin, by way of remembrancer, till the habit of attention was acquired of supporting the head by mere muscular effort, which she now had the full power of doing. Nor should I omit to add, there was also a great improvement in the mental faculties.

Neuralgic pain in the heart and palpitation, I have also found to be relieved, or entirely cured, by neuro-hypnotism, more certainly and speedily, than by any other means. The following are examples: —

Case LIV. Miss Tomlinson, 16 years of age, I have already referred to. She had suffered severely from painful affection of the heart, with palpitation, which had resisted all treatment, and she had been prescribed for by eminent professional men, both physicians and surgeons. After being twice hypnotized, the affection of the heart disappeared, and has never returned but once, when it was immediately

removed by hypnotism. It is now seventeen months since she was first operated on, and she is in perfect health.

Case LV. Miss Stowe, 22 years of age. I have already referred to her as one of the cases in which sight was remarkably improved by hypnotism. She had also suffered most severely from palpitation of the heart, accompanied with difficulty of breathing and dropsy, and various other symptoms which led the medical attendants, one of them an eminent physician, to pronounce the case hopeless, considering there was serious organic disease of the heart. After being twice hypnotized, all symptoms of affection of the heart disappeared, (sufficient proof it had been only functional derangement,) and she was speedily in the enjoyment of perfect health, and has been so now for the last twelve months, and that from hypnotism only. This patient had leucorrhœal discharge, which had resisted every remedy for years, and was so offensive as to cause suspicion she had malignant uterine disease. It was completely gone in a week, after being first hypnotized. She had no medicine excepting a simple aperient pill occasionally. I should add, her hearing, as well as sight, was very much improved by it.

Case LVI. Mr —— had suffered severely from pain in the heart and palpitation. He was hypnotized with decided relief, and a second operation completely restored him, and he has kept well for the last eight months.

Case LVII. Miss —— had suffered much from palpitation of the heart, so that she could not ascend an easy stair without bringing on the most violent

palpitation. I tested this before operating on her. After being operated on, caused her ascend the same flight of steps, which produced no palpitation, and she has never required the operation to be repeated.

Case LVIII. A young man had suffered much from valvular disease of the heart and palpitation and difficulty of breathing for four years, the consequence of a rheumatic fever. He could not walk more than twenty or thirty paces without being forced to stand or sit down. After being hypnotized for a short time he could manage to walk upwards of a mile at a stretch. In this case there was so much organic disease as precluded the hope of a perfect cure, but no means could have achieved for him what hypnotism did, and in such a short time too.

When considering the power of hypnotism in blunting morbid feeling, I may advert to its power of relieving, or entirely preventing, the pain incident to patients undergoing surgical operations. I am quite satisfied that hypnotism is capable of throwing a patient into that state in which he shall be entirely unconscious of the pain of a surgical operation, or of greatly moderating it, according to the time allowed and mode of management resorted to. Thus, I have myself extracted teeth from six patients under this influence without pain, and to some others with so little pain, that they did not know a tooth had been extracted; and a professional friend, Mr Gardom, has operated in my way lately, and extracted a very firm tooth without the patient evincing any symptom of feeling pain during the operation; and when roused, was quite unconscious of such an operation having been performed. He has extracted a second for this patient,

and one for another, without their being conscious of the operation. To insure this, however, I consider that, in the majority of instances, it is quite necessary the patient should not, when he sits down, know or imagine the operation is to be performed *at that time*, otherwise the distraction of the mind, from this cause, may render it impossible for him to become hypnotized deeply enough to render him *altogether insensible to pain*. The following case will illustrate this view.

Case LIX. Mr Walker called on me, stating he had been suffering from a violent toothache; said he was anxious to have the tooth extracted, but that he suffered so much pain from the operation, on former occasions, that he could not make up his mind to submit to it, unless when hypnotized. He had been frequently hypnotized, and was highly susceptible of the influence. I told him I should be most happy to try, but that unless he could restrain his mind from dwelling *on the operation*, I might not be able to succeed in extracting the tooth, *entirely without pain*. He sat down, and speedily became hypnotized, but I could not produce *rigidity* of the extremities, nor *insensibility to pinching*, which in general were so readily induced in him. I therefore roused him, and told him the fact. He stated he went on as usual *to a certain point*, but then began to think, "now he will be putting the instrument in my mouth," after which the hypnotic effects went no farther. The pain was gone, and he left. In the evening he again called on me, when I tried him once more with the same results. I now aroused him, told him it could not be done with him reduced to a state of *total insensi-*

bility, and that I should therefore extract it now that he was awake. I now extracted the tooth. He was conscious of my laying hold of it, but had felt so little pain that he could not believe the tooth had been extracted. Nor would he believe it till he had the tooth put into his hand. I now requested him to be hypnotized once more, when he became *highly rigid and insensible, in a shorter time than I had ever seen in him before.* From this, and other cases, I infer, that if it is intended to perform a surgical operation *entirely without pain*, whilst in the hypnotic condition, the patient's consent should be obtained for it to be done *sometime*, but he ought on no account to know *when* it is to be done, otherwise, in most cases, it would foil the attempt.

However, that patients may be operated on with greatly *less* pain even when in the *first* degree of hypnotism, and whilst expecting an operation, is quite certain, from the result of the case of Mrs ——, related below, which I now refer to as Case LX. I have also performed other operations under similar circumstances, and with similar results, namely, with *greatly diminished* pain, although not *entirely without pain.*

Case LX. A lady had abscess connected with disease of the orbitar process of the frontal bone, had the matter discharged by small puncture, the wound closed by first intention and again opened, as required, by the lancet. She experienced so much pain on each occasion as to induce me to hypnotize her, after which she made no complaint, although I durst not carry it far owing to the state of the brain. On one occasion I was anxious to ascertain how she would

feel by operating *without hypnotizing*, when the result was so distressing, as to induce me always in future to hypnotize her, before such operations, and then all went on well.

Case LXI. An adult with worst variety of Talipes varus, of both feet, had the first operated on in the usual way, and the other whilst in the primary state of hypnotism. The present ease and future advantage, in respect to the latter operation, was most remarkable. I have operated on upwards of three hundred club feet now, and I am warranted in saying I never had so satisfactory a result as in the one now referred to.

In cases of dyspepsia it is of the greatest service. Most patients feel the appetite greatly increased by being hypnotized, and that the digestion is more vigorous than before being operated on. All complaints, therefore, immediately connected with, or dependent on, indigestion, may be expected to be benefited by hypnotism. It is well known, many cutaneous diseases are of this class; and the following will illustrate the remarkable power exercised by hypnotism on this symptom, as well as several others associated with it:—

Case LXI. Mrs O., 33 years of age, the mother of a family, had been very nervous for fifteen years, with tremor of the arms, was easily alarmed, much disturbed by distressing dreams, and required being aroused several times every night from severe attacks of nightmare. She had also suffered severely from an inveterate eczema of the chest and mamma, and integuments of the abdomen, which, for five months, had resisted every remedy, both external and internal, under highly respectable medical men. The fingers of

one hand were also affected with impetigo. She consulted me 31st August, 1842, when she was hypnotized, and was aroused greatly relieved from the distressing feelings of the head, and general nervousness. Her husband assured me, that on walking out with her same evening, had he not seen her, he could not have believed it was his wife who had hold of his arm, so much was the tremor of her arm improved, and she slept soundly all night without being troubled either by dreams or nightmare. She was hypnotized daily, and in a few days she was quite well, both as regarded her general health, and the obstinate skin disease; and as she had no medicine nor external application, there could be no disputing that it resulted entirely from the influence of hypnotism. She has been well nearly ten months.

Case LXII. J. C., aged 40, had been severely afflicted for eighteen months with impetigo sparsa, extending from a little below the knee to near the toes. He had also severe pain in the ankle joint, so that he had been disabled for work for eighteen months. I hypnotized him, when he could walk better, after first operation, without his stick, than he could do immediately before with it. In a few days the improvement was very remarkable, and within a week the disease of the skin was nearly well, and very little pain in the joint. He was hypnotized almost daily till the end of the month, had no medicine, and no dressing but a little spermaceti ointment to prevent the cloth surrounding his leg from adhering to the sore; and the skin disease being now quite well, and very little pain in the ankle joint, in a few days after he was enabled to resume his work. He had

undergone much treatment, under both public and private practitioners, but was becoming worse instead of better. The immediate improvement in the appearance of the cutaneous disease, as well as feelings of the patients in the two last cases, were too obvious to admit of a doubt as to the remarkable powers of hypnotism.

The next cases I shall refer to, are those of permanent contraction or tonic spasm. The following are interesting examples of this form of disorder, and the success of hypnotism in the treatment of them.

Case LXIV. Mr J. O. 21 years of age, called on me 1st October, 1842, complaining of a pain in the left temple, a continual noise in the left ear, with occasional shoots of pain, and the hearing of that ear very imperfect. He complained also of inability to open the mouth so as to enable him to take his food comfortably, and that mastication caused great pain, so that he frequently felt compelled to decline taking his meals. Complaints had been coming on since previous Easter, and were becoming worse, notwithstanding he had been under the care of two medical men up to the day before he called on me. That day, 10th October, 1842, he could not eat breakfast but with great difficulty, and had been compelled to take rice and milk for dinner for two days, as he could eat nothing solid. I found he could not permit the mouth to be opened more than half an inch without great pain and difficulty ; and besides the dulness of hearing already referred to, I found he had also very imperfect sight of the left eye, which I tested very accurately. He had not been aware of this until I called his attention to it. I hypnotized him for about

eight minutes, during which I was enabled to open the mouth till the front teeth were nearly two inches asunder, and he experienced no inconvenience from me doing so. On being aroused, all the pain in the temple was gone ; he could himself separate the teeth one inch and three quarters, as accurately measured, in presence of four very intelligent gentlemen who had been present during the operation ; and he could move the jaws with the most perfect freedom, and without pain. The hearing was also much better, and the sight of the left eye also most remarkably improved. 2d October, called on me again, when he stated he had been enabled to eat a good supper after he left me the night before, and to take his breakfast and dinner with perfect comfort to himself ; that his hearing was much better ; and the sight of both eyes as nearly as possible equal. He had had no pain in the temple since he was operated on, unless when the mouth was opened to the utmost extent, and even then it was trifling. He could now open the mouth to nearly one inch and three quarters, *before* being operated on to-day, and *after* the operation, to the extent of two inches, that is, the front teeth were two inches apart.

This patient called on me a few days after to be operated on a third time, and retained the improvement noted above. He was to call again if he had any relapse, but as he has not done so, I conclude he continues quite well, and it is now nearly seven months since I last saw him.

I shall now refer to other cases of spasmodic affection, which are most interesting, as they afford us strong grounds to hope that Tetanus, Hydrophobia, and other

analogous affections, may be arrested and cured by this agency.

Case LXV. A girl was seized with violent tonic spasm of the right hand and arm, and side of the face. A respectable surgeon was consulted, who ordered a blister to the nape of the neck, medicine, fomentation, and liniments to the parts affected. The symptoms became more urgent, and they sent for the surgeon again, but as he was out, and as they were much alarmed, I was consulted. The blister had been applied, but the medicines had not been used as directed. I found the hand so firmly clenched that it was impossible to open it, the arm so rigid it could not be moved ; but, knowing the efficacy of my new remedy, I hypnotized her, and in *two minutes*, with the most perfect ease, I unlocked the hand, and removed the other spasmodic contractions, and she was instantly quite well, and has continued so ever since, now more than a year.

I shall only record one additional case, and a more remarkable or satisfactory one I think could scarcely be adduced. I give the case as correctly recorded by the patient's father, in a letter he sent for my approval, previous to having it sent to be recorded in some periodical. I preferred having its publication postponed, and now give it precisely in his own words.

Case LXVI. Miss Collins of Newark. "My daughter, 16 years of age, had been afflicted for six months with a rigid contraction of the muscles on the left side of the neck, to so great a degree, that it would have been impossible o insert an ordinary card between the ear and shoulder, so close was their

contact; and consequently she was rapidly becoming malformed. She had had the best advice to be procured in the country, and I had taken her to London with a written statement of the treatment previously employed, and had the opinion of Sir Benjamin Brodie, who approved of what had been done, but gave no hope of speedy relief.

"In consequence of seeing a report of a lecture given on the subject by Mr Braid, surgeon, St Peter's Square, Manchester, and a letter written to that gentleman by Mr Mayo of London, I went with her, by the advice of Dr Chawner, who indeed accompanied us, and placed her under the care of Mr Braid on Thursday evening, the 24th March last, (1842.) In less than a minute after that gentleman began to fix her attention, she was in a mesmeric (neuro-hypnotic) slumber, and in another minute was partially cataleptic. Mr Braid then, without awaking her, and consequently without giving her any pain, placed her head upright, which I firmly believe could not, by any possibility, have been done five minutes before, without disruption of the muscles, or the infliction of some serious injury, and I am thankful to say, it not only continues straight, but she has the perfect control over the muscles of the neck. A nervous motion of the head, to which she had been subject after her return from Manchester, has entirely ceased, and she is at present in excellent health. It is necessary to remark, that at Dr Chawner's recommendation she was frequently watched while asleep, but not the slightest relaxation was observed in the contracted muscles.

"Many respectable persons can bear testimony to the statements herein made.

(Signed) JAMES COLLINS."

"NEWARK, 11*th May*, 1842."

I have been informed that some very absurd reports have been circulated, even in the metropolis, as to my mode of operating on this patient, namely, that I had exhibited a vast display of gesticulations and hocus pocus, in order to work upon her imagination. SUCH STATEMENTS ARE UTTERLY UNTRUE. I simply desired her to maintain a steady gaze at my lancet case, held above her eyes in the manner pointed out at page 27 of this work, and after the eyes had been closed, and the limbs extended for about two minutes, I placed my left hand on the right side of her neck, and my right hand on the left side of her head, and, by gentle means, gave a new direction to the sensorial and muscular power, and was thus enabled by *art*, rather than mechanical force, in less than half a minute, to incline the head from the left to the right of the mesial plane. The muscular contraction being thus excited on the right side of the neck, in muscles which had been inactive for six months previously, was the surest and most natural mode of withdrawing the power from their antagonists, and reducing the spasm of the contracted muscles on the left side. After allowing the patient to remain two minutes supporting her head, now inclined towards the right, by her own muscular efforts, to give them power on the principle already explained, I aroused her in my usual way, by a clap of my hands. The patient's father, and Dr Chawner of Newark, were present the whole time,

and to them I appeal as to the correctness of this statement, and in refutation of the vile, unfounded calumny above referred to.

After the lapse of a year Mr Collins was so kind as write, to inform me his daughter continued in perfect health, with complete control over the muscles of the neck.

I could easily adduce many more interesting cases, but trust those already recorded may be sufficient to prove that hypnotism is an important addition to our curative means, and a power well worthy the attentive consideration of every enlightened and unprejudiced medical man.

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FINIS.

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ERRATA ET ADDENDA.

Page 14, line 2, *for* Arsal, *read* A real.

— 17, bottom line, *for* phenomena, *read* phenomenon.

— 34, line 17, *for* 33, *read* 38.

— 57, line 32, *for* effects, *read* efforts.

— 78, line 16, *for* state, *read* stage.

— 24, line 26, *after the word* themselves, *add, as farther proof of the success of hypnotism*, At the conversazione given on the 29th June, 1842, to the Members of the British Association, two men and two youths were brought off the street. One man and both youths were operated on; all the three were hypnotized, and one of the youths redueed to the rigid state.

Page 129, line 6, *for* warrants, *read* seem to warrant.

— 143, line 7, *for* the relation whieh, *read* that some relation.